

Class QL 50

Book B 873

Copyright N<sup>o</sup>

**COPYRIGHT DEPOSIT.**







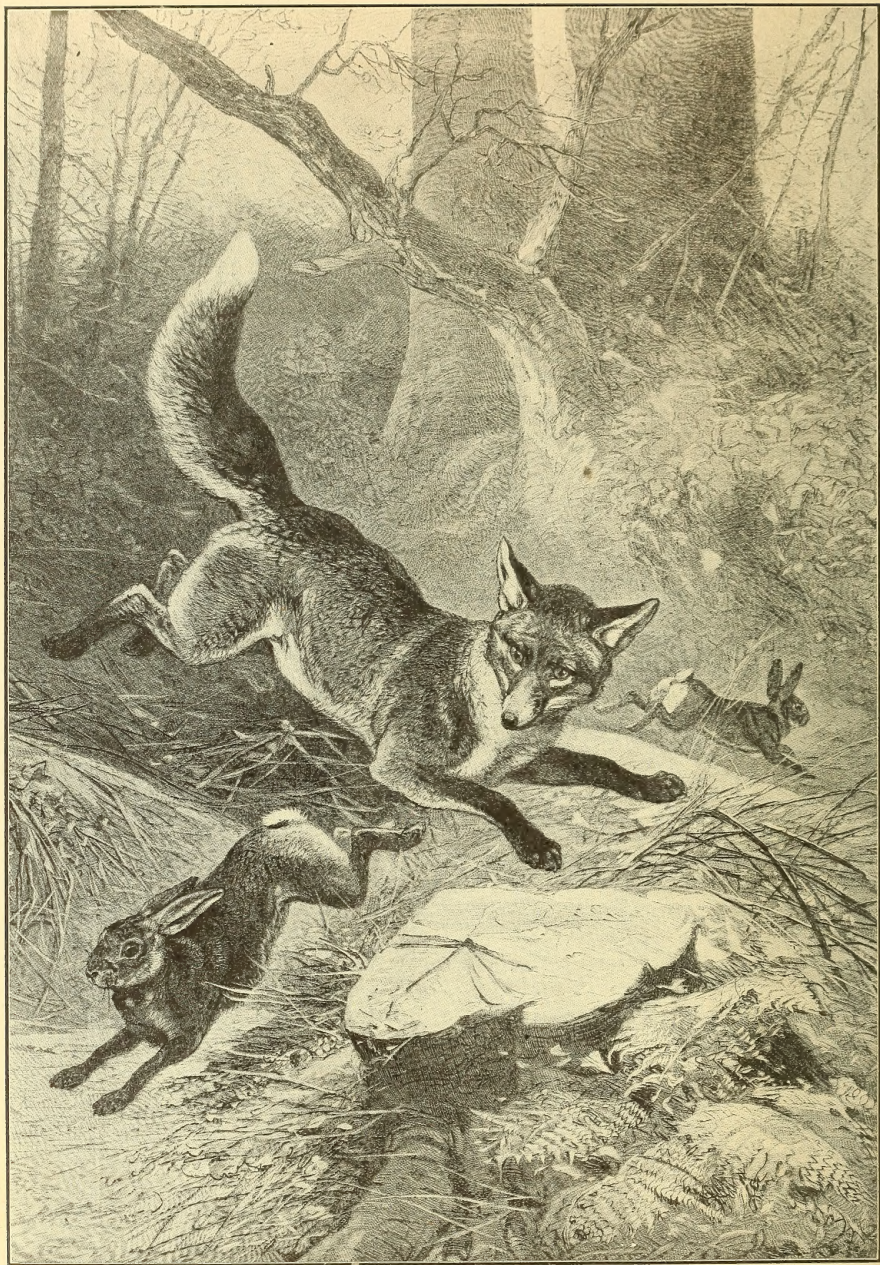






655  
781





A Fox rabbit-hunting.

(Frontispiece.)

(See page 160.)



# ANIMALS in ACTION

STUDIES and STORIES of *BEASTS, BIRDS*  
and *REPTILES*; their HABITS, their HOMES  
and their PECULIARITIES



COMPILED and ADAPTED from THE GERMAN  
by ELBRIDGE S. BROOKS  
author of THE STORY OF THE NINETEENTH CENTURY

ILLUSTRATED with MANY SKETCHES of  
ANIMALS Drawn from LIFE, as they Appeared  
in their NATIVE Haunts and NOT in Captivity

BOSTON  
LOTHROP PUBLISHING COMPANY

THE LIBRARY OF  
CONGRESS,  
Two COPIES RECEIVED  
APR. 29 1901  
COPYRIGHT ENTRY  
*Apr. 12, 1901*  
CLASS *aXXc*. No.  
*7050*  
COPY B.

COPYRIGHT,  
1901,  
*By*  
LOTHROP  
PUBLISHING  
COMPANY.  
ALL RIGHTS RESERVED.

VERMONT  
RECORDS

QL 50  
B 873



## CONTENTS.

	PAGE
The Golden Eagle in his Nest . . . . .	I
Fight between Two Golden Eagles . . . . .	6
A Gorilla fighting with a Leopard . . . . .	10
Corralling the Zebra . . . . .	14
The Otter and the Wild Goose . . . . .	18
The Partridge and the Mouse Weasel . . . . .	22
Fur Seals fighting for a Mate . . . . .	26
A Mail Carrier of the Desert . . . . .	30
Black-backed Jackal and Gnus . . . . .	33
Marsh Hen and Pike . . . . .	37
Blackcocks fighting . . . . .	41
The Aurochs, or European Bison . . . . .	45
Crocodiles in Battle . . . . .	49
The Apteryx and the Dingo . . . . .	53
The Anaconda fishing . . . . .	57
Sea-elephants . . . . .	61
Life beneath the Sea . . . . .	65
The Condor and the Llama . . . . .	69
The Giant Salamander . . . . .	73
Hunting with the Chetah . . . . .	77
The Climbing Kangaroo . . . . .	81
The Striped Adder and the Frog . . . . .	82
The Walrus . . . . .	86
The Water Moccasin . . . . .	90
The Great Turtle . . . . .	93
An Esquimau in Battle with a Polar Bear . . . . .	97

	PAGE
The Swan and the Fox . . . . .	101
Hunting the Tiger with Elephants . . . . .	102
Saved . . . . .	109
The Shrike . . . . .	113
The Black Gelada . . . . .	117
Eagle Hawk and Chameck . . . . .	121
The Yak . . . . .	125
The Sea Eagle . . . . .	131
The Dolphin and his Guests . . . . .	132
The Oryx and the Painted Hyena, or Hunting Dog . . . . .	135
The African Ostrich . . . . .	141
Grizzly Bear attacked by a Buffalo . . . . .	142
A Diver defending himself against Sharks . . . . .	145
The Wood Owl . . . . .	151
Albatrosses and Sea Gulls . . . . .	152
The Desert Lynx . . . . .	155
Ocelot and Night Monkey . . . . .	159
"Who stops to choose waits to lose" . . . . .	160
Hamster and Polecat . . . . .	163
The Spectral Tarsier hunting Drosera . . . . .	167
The Aoudad . . . . .	171
The Sparrow Owl catches a Squirrel . . . . .	172
The Hyena and the Zebra . . . . .	177
The Opossum and the Earth Squirrel, or Chipmunk . . . . .	181
Fighting Sea-lions . . . . .	185
Mother Bear bathing her Cubs . . . . .	186
Tiger with Booty . . . . .	191
Giraffes at a Lagoon . . . . .	192
The Fossa . . . . .	198
Ant-bears in a Quarrel . . . . .	201
A Prairie Scene in Winter . . . . .	202
Wart Hogs . . . . .	208

# CONTENTS.

v

PAGE

The Saiga, or Antelope of the Steppes . . . . .	212
Ocelot capturing a Flamingo . . . . .	216
The Orang-outang . . . . .	219
Suricate and Great Shrew Mouse . . . . .	220
Bearded Vulture and Common Griffin in Combat . . . . .	226
The Peacock Argus . . . . .	230
The Tapir . . . . .	234
The Octopus and the Lobster . . . . .	238
The California Bighorn . . . . .	242
A Vanishing Animal . . . . .	246
Bezoar and Lynx . . . . .	250
The Frigate Bird . . . . .	254
Mongoos and Cobra de Capello . . . . .	258
The Cougar, or Puma . . . . .	262
The Crocodile and the Pelican . . . . .	265
Egyptian Asp capturing a Jerboa, or Jumping Mouse . . . . .	269
Marabou in Battle with Hyenas . . . . .	275
Sperm Whale and Polar Fox . . . . .	276
Elk in Battle with Wolves . . . . .	280
Dingo and Duckbill . . . . .	283
The Ibex . . . . .	287
The Narwhal . . . . .	291
Buffalo attacked by Lions . . . . .	295
John Dory and the Octopus . . . . .	296
A Family of Chimpanzees . . . . .	302
Fighting Kangaroos . . . . .	305
A Whale attacked by Grampi . . . . .	306
A Battle between Deer . . . . .	311
Wapiti Deer on a Rocky Mountain Range . . . . .	312
A Duel in an Indian Jungle . . . . .	318
Wandering Reindeer . . . . .	321
Dogs pursuing a Wild Boar . . . . .	327



	PAGE
Tyras pouncing upon a Pampas Deer . . . . .	328
An Elk at Bay . . . . .	331
Kite, or Glede, and Saker . . . . .	332
Monitor and Egyptian Goose . . . . .	337
Tree Panther and Tree Snake . . . . .	338
The Leopard meets his Match . . . . .	344
A Battle between Giants . . . . .	347
A Beaver Colony . . . . .	351
Quarrelsome Storks . . . . .	356
The Cat and the Donkey, or a Safe Port . . . . .	359
Types of Dogs . . . . .	360

## ANIMALS IN ACTION.



### The Golden Eagle in his Nest.

**T**HE golden eagle lives in the deepest forests and among the loftiest mountains of Europe, Asia, and Africa. He is the noblest of the family of birds of prey, and is imposing in size and bearing. Even when he is in repose his proud, erect position and the sparkle of his great and shining eyes distinguish him as the lord of the bird kingdom. But the full majesty of his appearance becomes apparent when he is sweeping in mighty circles high in the blue sky. Here he disports himself for many hours at a time, apparently motionless in the air except for an occasional tremor of his wings as he changes the direction of his flight. The golden eagle is an exceedingly graceful and spirited bird, always alert and keen-sighted, and with a most wonderful power of scenting his prey. The golden eagle's vision has the invaluable faculty of being able to adjust itself instantly to every change of distance. The muscles of his eyes are so delicately contrived that he can move the visual lens forward or backward to discern objects close to him or at an immense distance away, without delay or effort. This wonderful power of sight enables this lordly hunter to espy his prey, no matter how small it may be, from the loftiest mountain-top or in the midst of the limitless spaces of blue.

He fears no resistance. The calf of the roebuck as well as the hare, the rabbit, and the tiny field-mouse alike fall victims to his powerful talons. Bustard, swan, and wild goose as well as prairie hen and quail do not escape his rapacity, and he has been even known to seize kids and lambs in the barn-yard almost under the very eyes of the farmer. The spiteful marten and the disagreeable skunk do not fare better than the sly fox when he has marked them for his prey, and even dogs and cats are often borne aloft, struggling for life in his mighty grip. The speediest flight does not avail the quadruped, nor the swiftest wing the bird, when the golden eagle has caught sight of them. With perseverance and cunning he pursues the partridge and the snipe. The king of birds, like some other kings, is a firm believer in the doctrine that might makes right, and he often darts through the air to pounce upon the hawk and tear his prey away from him.

The mating time of the golden eagle begins in March, when he builds his nest upon a frowning cliffside or in the topmost branches of the highest forest tree. He builds his home of boughs, sometimes as thick as a man's arm, and lines it on the inside with meadow plants, grass, and hair. The eggs of the golden eagle are very much like those of the buzzard. They are dotted or flecked with brown spots upon a greenish white ground.

The hatching of the young, which make their appearance after five weeks of setting, falls to the female alone. The brood is as ugly and awkward as the parent birds are dignified and beautiful. It happens very frequently that most of the eggs in the nest are sterile, and a single offspring is the only result of the season's nest building. Upon this remnant the whole love of the parent eagles unites. Almost every hour the old birds bring to the nest hares or quail which they have





The Golden Eagle in his Nest.



captured in their hunting expeditions. With parental tenderness the father and the mother dismember their prey and spread out the choicest bits before the ever clamoring offspring. His nursery, therefore (as shown in the picture), presents a suggestive scene, with its refuse heap of hares' legs, skulls of birds, hair, feathers, and wool in gruesome confusion. But sometimes a wonderful thing happens in this place of skulls. Small birds, particularly finches and sparrows, make their homes in the immediate neighborhood of the nest or even among the dry branches of which it is built, and live there in peace and comfort. These birds are the only company that the eagle tolerates. Two couples never build their nests within the boundaries of their respective hunting grounds. The safety of the sparrows depends, not so much upon the generosity of the eagle, as upon the nimbleness and small size of the impertinent little fellows. The sparrows understand that in the presence of the eagle they find protection from the attacks of hawks and falcons, and so they build their nests in the eaves of the eagles' home. In a single eyrie there were once found no fewer than fifty-two sparrows' nests, a circumstance which illustrates, incidentally, the roominess of the bird-king's castle.

## Fight between Two Golden Eagles.

*(Stone Falcons.)*

THE traveller in Switzerland often sees the lordly golden eagle soaring in majestic flight over the Alpine heights and abysses. With his long pinions outstretched he glides through the air swiftly, and his wings hardly betray any motion. The keen eye of the proud bird scans the earth minutely and espies the tiniest prey from his mighty elevation, and begins to settle toward the earth in a slow, spiral flight. Then he suddenly draws his wings to his sides and shoots downward with the swiftness of a bullet, sinks his claws into the body of his victim, and kills it without even using his beak. After the death the eagle stands up to his full height, and, in the consciousness of victory achieved, utters a scream of triumph. After this the powerful beak begins its work of destruction. The golden eagle plays sad havoc among the hares, lambs, and kids, and does not spare the smaller beasts of prey, such as cats and foxes. Even little children are not altogether safe from his attacks, and many stories are told of the boldness with which these lords of the air have pounced upon babes and carried them off in the very sight of their terrified parents. Storks, cranes, and geese also frequently furnish food for the haughty marauder. The golden eagle broods in the early summer upon some inaccessible mountain cliff, or else among the highest branches of a towering tree. The male eagle never permits the presence of a rival in the neighborhood of his





Fight between Two Golden Eagles.



nest. When an intruder appears, the master of the nest rushes upon him with an angry cry. The intruder is invariably impressed by the warmth of the welcome that he finds. He feels unsafe in the strange hunting district and considers whether to accept the fight with its rightful owner. Then his boldness returns, and the giant birds soar up into the sky, where they wheel about each other in search of an opportunity for an attack. The circle of their flight grows smaller and smaller, and then one of the birds suddenly darts toward his opponent. Both use their claws with such effectiveness that the crimson drops begin to trickle. There is a rustling of feathers, and heavy beaks strike into angry bodies. The battle becomes more and more desperate, until the fighters tumble over each other toward the ground, and finally the intruder slinks away bleeding and torn. The victor follows him for a time and then turns to his mate, and is received with joyful cries of praise and approbation. The golden eagle lays from two to four greenish eggs spotted with brown. So voracious is the appetite of the fledglings that the nest is invariably littered with the remains of various animals. In one nest fragments of forty hares and three hundred ducklings were found.

## A Gorilla fighting with a Leopard.

IT is barely a half-century that we have known anything about the life of that powerful, manlike ape, the gorilla. He was, however, known to the Carthaginians more than two thousand years ago, when with a fleet of sixty great ships they made a voyage to the west coast of Africa. Hanno, the leader of the expedition, has described his travels in his "Periplus Hannonis," and in his work he mentions distinctly the gorilla; but nothing more was heard of this manlike ape after that time until further information about the gorilla came to light about fifty years ago. In 1847 a gorilla's skull was brought to Europe, and served to establish the existence of the animal. Then, after further details about the interesting ape had been furnished by Wilson, Savage, and Ford, it remained for the Frenchman, Du Chaillu, and the Englishman, Read, to give the first complete description of the gorilla, and they confirmed fully Hanno's accounts about this "king of the African jungles." The full-grown gorilla (*Anthropopithecus gorilla* is his Latin name) is an extraordinarily strong animal, 1.65 metres in height and from ninety to ninety-five centimetres across the shoulders. It has arms or fore legs about 1.08 metres in length, of tremendous muscular development, and its bite is as fierce as that of the bear. The gorilla lives only in the swampy jungles of the west coast of Africa, in the vicinity of the equator, about the rivers Gaboon, Muni, and Fernandovaz. Here he is to be found in little troops containing one





Gorilla defending his Family from a Leopard.





or two males and several females with their young. He builds his camp in the trees and lives on palm-shoots, bananas, leaves, and sprouts, besides various kinds of nuts and fruits. The gorilla is not in the least afraid of a human being, and is a dangerous adversary on account of his enormous strength, his quickness, and savagery, especially when he has been wounded without having received a death-blow. At such times his wild anger arouses him to fearful execution.

The gorilla throws himself boldly upon the most formidable beasts of prey in his native jungles, the panther and the leopard, and often overcomes them through the colossal strength of his fists, aided by his frightful teeth. Thus even the leopard, as in the battle illustrated in our picture, must succumb to his foe. He has fought with an old male gorilla. The robber has been on the watch for the young gorillas in the arms of their mother, and the old male is defending his family with terrible fierceness.

## Corralling the Zebra.

**A**FRICAN colonizers have been trying for a long time to breed a useful draught animal that can withstand the disastrous effects of the climate. Horses, mules, and asses perish very quickly in that torrid country. On the other hand the native-born zebra is "immune" from disease and the death-dealing bite of insects. After many experiments, the early belief that the zebra is incapable of domestication has been dispelled. Lieutenant Bronsart von Schellendorff, a German officer stationed in West Africa, has for nearly two years been conducting with some success the training of the zebra and the ostrich for carrying purposes. The zebra takes immediate fright at the slow and creeping approach of the hunter. But if the latter advances upon his prey openly and without concealment, he can approach to within fifty yards of the herd without stampeding it. This peculiarity of the zebra's temperament suggested to Lieutenant von Schellendorff the plan of driving herds of these animals into an enclosure. The Ndorrobos, a native tribe which is most often assigned to such a round-up, are noted hunters, and follow the sport with great zest. Herr Bronsart thus describes a hunt of this kind: —

"About three hundred Ndorrobos formed a great half-circle about the open hunting-ground which lay between a small hill and a creek before us. At last little bands containing from ten to twenty zebras with a few foals, and a band of gnus of about



Corralling the Zebra in West Africa.





fifty head, appeared about half a mile away, between the hill and the driving line. The plain before us was dotted with gazelles.

"At eight o'clock we discovered a great herd of gnus and zebras, nearly a hundred and fifty head in all, together with eleven ostriches. At about eleven o'clock there rolled toward us from the northwest a giant cloud of dust from which countless zebras and gnus gradually emerged, with the eleven fluttering ostriches leading the van. At our feet scampered frightened, shadowy little groups of gazelles. Higher up, and about three-quarters of a mile behind these little folk, stood the giant herd of zebras, which the little troops of the morning had joined. About a hundred zebras stood packed tightly together, while as many more were scattered about, running back and forth in great panic. A herd of gnus at this moment tried to break through the line, much to our disgust, for the round-up had been designed solely for zebras.

"Then it was the Ndorobbos appeared all along the line, running, yelling, and brandishing their clubs, spears, and bows. The line had been closed. In two great columns the wild herds turned upon it with a rush. According to previous arrangement the whole driving line, re-formed upon the raising of a white flag, closed up the gap. Then the flag was lowered, and we marched slowly forward, in perfect silence, so as not to stampede the remaining zebras.

"The ostriches, flapping their wings constantly, had already entered the *cul-de-sac*, while the great herd of zebras and gnus were about to enter the corral. If only the crowd of beaters could have done their duty and remained quiet! It happened, however, that an Askari, who stood nearest the zebras, thought it about time that something should happen, and let fly a shot.

"In a twinkling, gnus and zebras were in a stampede. They

thundered back the way they had come, the gnus with horns lowered, the zebras with ears set back, charging away straight upon the driving line. They were off! Later on four young gnus and three zebra foals were routed out of the tall grass by the Ndorrobos, and this catch partly reconciled me to my ill luck."

### The Otter and the Wild Goose.

**J**UST as in olden times the knights in brazen armor rode down from their strongholds, waylaid the traveller, and after a short resistance dragged him off pitilessly to strip him of his possessions and extort from him a heavy ransom, so, to-day, the robber knights of the animal kingdom make their forays. But these do not satisfy themselves with despoiling their victim of his property; they rob him also of his life. The woods and fields, the air and the water about us, are teeming with such high-handed villains, armed with powerful offensive weapons, who seize their prey with the greatest boldness and cunning. Never are the harmless creatures safe from these rovers. No wonder that they place their dwellings in the greatest possible seclusion and venture out of them with trembling caution. Yet often the most constant watchfulness is in vain. Even when everything seems safe the enemy is lurking in his hiding-place, devising how he may seize his unsuspecting victim. Our picture portrays just such a pitiful scene. The wary wild goose has taken a careful look around. The waters lie before her beautiful and still. Nothing suspicious can be seen, and so Mother Goose thinks that she may venture forth unobserved. But hardly has she touched the surface of the water, when, with the swiftness of lightning, a glistening head makes its appearance, sharp



Wild Goose captured by a Fish Otter.





claws hold fast the unhappy victim, and pointed teeth plunge into the quivering flesh. One choking death-cry, and the dead body hangs limp in the otter's mouth, while the highwayman swims away with his booty in triumph.

The otter is one of the worst malefactors in the animal world. His form is everywhere known, sharply distinct from that of any other beast of prey. Whoever has not seen him in freedom has possibly had occasion to observe him in a zoölogical garden or in a menagerie. In the shape of his skull, in his uncommonly fierce bite, in the elongated, low-lying body, and in the short legs which tread with the whole sole flat upon the ground, he resembles his cousin, the marten; but his head is somewhat more rounded than that of the marten. Moreover, as the otter lives largely in the water, his body, and also his long, tapering tail, are somewhat flattened, and his little eyes and ears are almost hidden in the fur. His five-toed feet are webbed, while his fur is short, thick, and water-tight, with an outer coating of coarse, stiff hairs which suggest elongated fish-scales. The color on the upper part of the otter's body is a glistening dark brown, especially glossy underneath and on the throat. The otter is about four feet long and weighs from thirty-five to forty pounds. He spends his days in idleness at home in some great self-excavated hole in a river-bank, which opens into the thicket by one or more tunnels under the surface of the water, and another to the top of the ground. He seldom ventures forth by day, but usually leaves his dwelling only at night and prefers to do his hunting by bright moonlight. His chief articles of diet are fish and crabs. It is estimated that a pair of otters consume fifty or sixty pounds of fish or crabs daily. The otter also catches mice, water-rats, and even birds, which he devours with their eggs. In addition he creates enormous havoc among the water-fowl.

The female otter gives birth at various times in the year to three or four blind young, which open their eyes about a week after birth, and, about two months later, leave their den, under the guidance of their mother, for their first lesson in fishing. They are charming little fellows, and are easily tamed. The flesh of the otter was formerly esteemed, in the monasteries of the Old World, as a savory article of food during Lent. At present it is not much eaten anywhere. On the other hand his pelt furnishes a very valuable fur. On account of his destructive habits, nearly all countries have offered rewards for the extermination of the otter. The animal is hunted in otter traps or with the help of dogs specially trained for the purpose of pursuing him in the water or forcing him out of his inaccessible hole.

### The Partridge and the Mouse Weasel.

THE life of one of our most beautiful and most harmless birds, the gray partridge, which chiefly frequents the fields and meadows of low-lying countries, and whose flight so pleasantly enlivens the rural stillness of the wide pastures, is one of the most imperilled and harassed in the whole animal kingdom. Many enemies persecute this defenceless, bright-eyed bird. Prompted by his appetite for its delicious flesh, man pursues the partridge with gun and dog or with nets and traps; and its peace is disturbed still more by meat-eating birds and quadrupeds. The fox and the marten, the badger, the polecat, and the weasel hunt the partridge and its young. The hawk, the sparrow-hawk, and the kite torment it, while the stork and the crow, when flying home over field and meadow, very often seize and devour its young. But the most tireless and the



Partridge Hen attacked by Weasel.





most dangerous, although the tiniest and the most insignificant, of all the enemies of the partridge is the weasel, known to the scientist as the *Mustela vulgaris*. This little animal, hardly six inches in length, including a tail one and a half inches long, is a cruel robber with an insatiable thirst for blood, and makes up in dexterity and craft what he lacks in size and strength. His elongated body and his narrow head permit him to squeeze through the most impossible holes and crevices, while his short, thin legs, ending in muscular toes tipped with sharp nails, enable him to hold fast his struggling prey. He creeps and springs noiselessly, climbs with incredible ease, and seizes his prey with cunning and swiftness, whether it be upon the ground or upon a bush or a tree. His strong sense of smell is an important help to him in his work of destruction.

In grace and suppleness of movement, as well as in the strength of the bite of his sharp, vise-like teeth, and in courage, the weasel has hardly an equal among the smaller beasts of prey, and he is one of the busiest and most successful of nest-despoilers. When the sportsman inspects his game preserves in the late spring, he often comes upon scattered feathers of a partridge, mingled with clean-picked bones and broken eggshells. He knows at once that the weasel has stolen upon a brooding partridge. Then, despite her desperate resistance, he has torn her limb from limb, and, not satisfied with his work, has broken and devoured even the eggs in the nest. The scene of such a tragedy is shown, in a sketch taken from life.

## Fur Seals fighting for a Mate.

THE beautiful, soft, and glossy pelt which is called seal-skin does not come from the common seal or sea-dog which is rather frequently met with along the northern sea-line of North America. The luxurious fur comes from another member of the family, the sea-bear or fur-seal that lives in the Polar seas. This is the animal shown in our picture. The full-sized adult reaches a length of six and a half or even ten feet. He is more active and much swifter than the other varieties of the seal, and is bolder in his battles for self-preservation. But the heavy, thick fur of the sea-bear, which enables the animal to live in the extreme Polar seas, is the most striking difference between him and his poorer relations. The sea-bear has, particularly upon the back and sides, a covering of long, gray, bristling hair, and under this is a thick layer of very soft and fine fur which covers the whole body. The sea-bears abandon their distant northern homes at the beginning of every summer, and in great herds come through Bering's Strait into the Pacific Ocean to spend the mating season on more southerly shores. Among their more favorite haunts are the Pribilof Islands, St. Paul and St. George, which lie west of the Alaskan coast about midway between the Aleutian Islands and the mouth of the Yukon River. They are two precipitous little islands, and upon them the sea-bears appear in countless numbers every year. Here many thousands of full-grown adults were slaughtered annually



Fur Seals fighting.





for their skins, until the United States and Great Britain stopped this indiscriminate execution in order to save the species from extinction.

The Pribilof Islands were formerly Russian territory, and, with the rest of Russian North America, or Alaska, were sold to the United States; so that the sealskin business is now almost entirely in the hands of Americans.

The migration of the seals to the Pribilof Islands is a curious process. By the middle of June an advance guard of males arrives at St. Paul and occupies all the level places upon the immediate coast and the stretches adjoining it. Later the females come, at first in scattered numbers, and then in ever increasing droves, until by the middle of July all the available places have been occupied. As soon as a female arrives, the adult males or bulls rush to meet her. The foremost bull cuts off Mrs. Sea-bear's way back to the water, and proceeds to approach her with his blandishments. He then seizes her by the back, draws her away from and over the others, and takes her to his own resting-place; here he finally collects all his twelve or fifteen wives and guards them jealously. It frequently happens that the lucky gallant is set upon by other males, which try to wrest his prize away. Such a struggle is presented in our picture. During the *mêlée* the poor female sometimes suffers very severely. As the pelts only become marketable in the sixth year of their life, only the older bulls are slaughtered, the female young seals being protected by rigidly enforced laws.

In September and October the herds leave the Pribilof Islands to return to the Polar seas, but regularly return each summer to their mating places on the islands.

## A Mail Carrier of the Desert.

THE noble picture by Horace Vernet, one of his many scenes from torrid Africa, which has been so long the dream of French colonial ambition, gives us a vivid impression of man and beast in the desert, following their lonely way across the apparently endless spaces to deliver the mail matter to a remote station. The wonderful animal that has been so appropriately nicknamed "the ship of the desert," and which is certainly as good as a steam-engine for travelling where no rail can be laid, is indispensable on the desert highway of traffic. His performances are simply marvellous. The *maharri*, the most highly prized breed of the camel, is of great size and remarkable speed. His daily march averages 120-160 German miles for days at a stretch, but one of these animals has been known to travel the distance from Tripoli to Rhadames, over four hundred miles, in twenty-four hours. Sometimes, however, they break down and die on the way, and their bones are scattered in great numbers over the surface of the sea of sand. The experienced rider knows no fear, if well mounted. He is provided with a flask of water, some food, and a pipe and tobacco for refreshment, and he also carries a carbine and a trusty sword for defence against a possible foe. The swaying, rocking trot of his animal takes Hassan or Abdullah quickly wherever his business may call him. The desert road is marked



The Ship of the Desert.





here and there by small stones which one sees protruding from the sand. They have been placed there by well-meaning predecessors to refresh the desert riders' memory of the true direction of the road.

## Black-backed Jackal and Gnus.

ON the east coast of Africa, in the territory stretching from Nubia to the Cape, roams a relative of the fox, the black-backed jackal. It resembles the fox very closely ; but its legs are longer and the pupils of its eyes are oval. This particular species of jackal derives its name from the sharply defined dark streak, broken with white spots, which runs down its back. Like Master Reynard, it has all the qualities of a successful thief, for it is a skilled jumper ; it can sneak, creep, and swim silently and swiftly, and is cautious and resourceful to a degree. During the night it prowls about the forests and plains, uttering its peculiar cry ; but while it prefers to hunt in the night, the jackal is frequently seen in the daytime. With a quick spring he leaps upon the nimble mouse, or tears the fledglings from the nest, or gives chase to the quick-footed earth-squirrel. It also pursues the hare and stalks small antelopes. Nothing living is safe from it, and even the larger insects, such as the beetle, locust, and their like, furnish dainties for its table ; but it has a special appetite for carrion. The natives detest the black-backed jackal, for it frequently appears in their yards or walks into their very larders in the dead of night, stealing everything within reach and working great havoc among the barnyard fowls. In common with some other thieves, it seldom shows much courage. But when it is driven into a corner it is very likely to turn at bay and defend its booty with great tenacity. The

scene of such a struggle is shown in our picture. A jackal has just robbed a henroost and is about to make off with its prey, accompanied by its mate, when it suddenly perceives the approach of a herd of gnus, that peculiar cross between the antelope, the horse, and the ox, which is one of the marvels of the African continent. The beasts come on, snorting loudly and beating a drum-beat upon the plain. The jackal cannot reconcile itself to the idea of running away without its prey. Therefore, in spite of the fierce appearance of the oncoming herd, it takes its stand to await their onrush, covering its booty with its fore legs. With its tail raised in the air, it shows every one of its sharp teeth, growling fiercely in the meantime, while its mates are very evidently in doubt whether to support it, or to run away.

Perhaps the jackal will succeed in turning the gnus from their path, but the probability is that a thrust from a powerful pair of horns will kill it, or perhaps it will be badly injured by the stamping and kicking of the vanguard, and the herd will continue on its way; for the gnus are high-tempered animals, quick and fierce in their attack, and the jackal can do nothing to check their assault. The gnu is eagerly hunted, for its fine flesh is considered a desirable delicacy for the table. In Cape Colony the gnus are fast disappearing, for the Boers have pursued the "Wildebeest" with great avidity since the earliest settlement of that country. The gnu is a powerful animal, reaching a total length of six feet, with a height of four feet at the shoulders. It is to be found throughout South Africa to the equator. The scientist Harris says, in describing the gnu: "With ungainly movements, swaying in all directions, its shaggy, bearded head thrown forward between its slender, muscular fore legs, its long, white tail streaming back in the wind, this fleet animal makes at once a wild and a ridiculous appearance."



Black-backed Jackals disturbed by Gnus.





## Marsh Hen and Pike.

**D**URING the first warm days of spring the marsh hen (*Fulica atra*) forsakes its southern winter resort, and seeks once more its familiar pond in northern latitudes. Like the stork and the swallow, it returns year after year to the same old pond. With its mate it wanders among the rushes and early reeds, searching for food and for a place in which to cradle their young. Marsh hens are beautiful and graceful creatures, conspicuous in their dark brown and slate-gray plumage, flecked with white on the sides, and a red spot in bold relief upon the forehead. About the sparkling eyes of the marsh hen are yellow circles, then gray ones, and last of all red. The beak is yellow at the end, shading into a red. The long toes are joined with webs. The nest of the marsh hen is to be found in a trampled clump of reeds, upon a decayed trunk of a tree, or upon an island of leaves spread thickly over the surface of the water—not a very artistic structure, but compactly built and well concealed. In it are six or sometimes as many as twelve eggs, which are large in comparison with the size of the bird, and are thickly flecked with brown dots. After a hatching of three weeks, the funny little fellows struggle out of their shells. On the day following they leave the nest and accompany their mother into the water, and a pretty sight they present as they tumble and flounder about the old birds. While the little ones are hunting for insects, their parents are keeping a close watch upon all sides for the slight-

est indication of danger. Suddenly, high up against the blue sky, there appears a dark spot. A sharp, frightened cry is heard upon the surface of the pond, and the entire family disappears with the speed of lightning. Where have they gone to? One would find it impossible to say, if here a little brown head did not peep from the shadow of the green lily-pads, or there the yellow point of a beak show above the surface of the water. The little birds are masters in the art of concealment, and dive and swim under water like fishes.

It would almost seem that no enemy could reach the marsh hen. The laws of man protect it, dogs and cats cannot follow it into the water, while hawks and kites cannot find it. But its wicked and calculating enemy, the pike, often succeeds in his fell purposes. The very appearance of this fish — the pike or *Esox lucius* — marks it as a bold marauder. Its body is thick, its head pressed flat, and its jaws can open wide, disclosing a bristling array of long, pointed teeth. The pirate steers through the water with a powerful stroke, and greedily devours a tadpole or a frog or whatever other creature he may seize. He pursues the ducklings and often destroys a whole brood at a time. The marsh hen, therefore, finds it impossible to remain in a pond where the pike has made its appearance, for even the full-grown birds are not safe from its successful attacks.

If the parent birds have good luck, the young ones are able to take care of themselves in a few weeks, and the old birds begin preparations for a new brood. When this, too, is hatched out, the picture of domestic life becomes doubly interesting, for the older brothers and sisters affectionately aid their parents in the care of the infants. This process is repeated throughout the summer, and at the beginning of autumn the whole pond has been stocked with these birds. Then, some fine night, they disappear as suddenly as they came, only to return to the



Pike attacking a Marsh Hen.





old home in the following spring. Inasmuch as only a single pair finds room enough for proper development in any one pond, the old birds defend their home against each aggressor, and, in spite of their tender care for the young at their helpless age, oppose their own offspring so vigorously when they show a desire to settle in the pond in which they began life that a bitter struggle often results.

### Blackcocks Fighting.

**A**KIN to the heath cock is the blackcock; this game bird, indeed, is the king of heath and moor of middle Europe and Asia, and is one of the most interesting denizens of the forests.

The heath, with a scattering growth of juniper bushes and birch trees, is his favorite resort, and here he lives through the greater part of the year, apart from the hens, taciturn and sulky. His food consists of buds, seeds, and berries, such as cranberry, bilberry, and juniper berry, besides wheat, oats, and buckwheat. He also greedily devours snails and worms, and has a pronounced appetite for the pupæ of ants. In the spring he seeks the company of the hen, and does his wooing in the deep wood, upon the moor, or in the meadow. Usually he makes his appearance in the twilight, perched upon a tree, and utters a cry consisting of a whistling sound, followed by a drumming like that of the turkey cock, and ending with a peculiar hiss. With the first signs of daybreak the cock leaves the tree and comes to the trysting-spot. Then begins a fantastic dance which one must have seen in order to appreciate. It is thus described by Naumann:—

"The cock makes the most extraordinary poses in quick succession. He begins by elevating his tail like a fan, and then stroking his head and neck feathers, holding his wings out from his body in such a way that the tips reach the ground. He then runs about in a zigzag course, springing and dancing, sometimes in a circle and sometimes backward, beating his wings, stretching his neck, now upward and then so far out before him that the bristling throat feathers sweep the ground. He repeats his remarkable calls so often and with such fury that he sometimes exhausts himself. If two cocks should meet at such a moment, there follows a battle royal like that between barnyard roosters under similar circumstances. With head sunk low, tail spread out fanlike, and wings drooping, they rush at each other and aim to inflict wounds with beak and spurs, as shown in the picture. After a short respite, due to utter weariness, they resume the contest with renewed bitterness and continue their desperate fight until one of the contestants is beaten and retires from the field. Then the victor perches upon the nearest tree and announces his victory in loud and joyous calls."

The wooing time of the blackcock lasts from four to six weeks, and at the conclusion of this period the cocks again retire into their privacy, leaving the hens to build rude nests of twigs, grass, and feathers, in hollows in the high grass, between ridges or under bushes. Here they lay from six to twelve yellow eggs, speckled with brown dots and points, and of about the size of a barnyard hen's egg. The young are hatched in about three weeks, and, like the domestic chicks, remain for a long time under the wings of the mother. The flesh of the blackhen is more toothsome and tender than that of the heath hen, and indeed the young blackcock is considered a great delicacy.



Blackcocks fighting.





## The Aurochs, or European Bison.

ONLY a small herd of some hundred specimens of the largest animal of the European continent, the aurochs, or bison, is now left in Europe. These animals the Czar of Russia keeps in semi-confinement in the forest of Bialowitza, in Lithuania, and from among them have come the few specimens that are to be found living in parks, or that may be seen, stuffed, in natural history museums. Only in the wilds of the Caucasus does this mighty member of the family of the ruminants roam about in a natural state. He has been exterminated in the north, in much the same way as his American cousin, the bison or buffalo. As a rule animals of bulky size vanish before the advance of civilization. This is an inexorable law of nature which even the scientists have not explained to their own complete satisfaction.

The full-grown male aurochs attains to a height of about five feet at the withers, is about eight feet long, and weighs nearly fifteen hundred pounds. He is a very stately animal, with a broad, well-formed head covered with a rich mane, like a growth of hair, and armed with round, sharp horns projecting at the sides. Almost the entire fore quarter of the animal is covered with a heavy coat of long and shaggy hairs, varying in color from a pale brown to a very dark shade of the same color. The heavy body from the neck to the middle of the back is very thick-set and slopes down to the haunches. The aurochs is thus the picture of power and ferocity, quite the most imposing animal of the European fauna, and lord of the swampy forests, where he rules

the herd, made up of a few young bulls, four or five cows, and some calves. The cow has one calf at a time, and protects it with great valor. When the young bulls have grown up sufficiently, the leader of the original herd drives them away to establish a new family connection. If he does not succeed in accomplishing this, he wanders about alone as an old bachelor, a great terror to the Caucasian hunter.

The aurochs of the Caucasus is, to all appearances, almost always on the move. This migratory habit may be due to the requirements of a food supply, or it may be the result of an instinctive dread of danger; for the wolves, when driven into the forest by the storms of winter, pursue the scattered herds tirelessly. They skim lightly over the surface of the deep snow, and soon seize the doomed aurochs, which sinks deeper and deeper at every bound. According to accounts, three wolves can cope successfully with an aurochs. One of them, by jumping here and there, holds the attention of the animal in front, while the others pounce upon him from behind. There are now about eight hundred or nine hundred auroxen in the forests of Bialowitza. When Greece was in its prime, the animal was to be found in large numbers in what is now Bulgaria, and throughout Central Europe. Some authorities have represented the aurochs as the original of the domestic cattle of Europe. The most recent investigations, however, prove the complete inaccuracy of this theory.



Bisons battling for Supremacy.





## Crocodiles in Battle.

THE home of the crocodile itself has been incorrectly described; for while the animal in early times was to be found in all parts of Egypt, it has now almost disappeared from that country and has migrated to the sluggish streams of East Soudan and the waters of Central Africa. The crocodile spends his days upon the flat sandbanks asleep or sunning himself, and seldom wanders more than a hundred steps away from the water. When disturbed he hurries back to it with great swiftness, so that he cannot be overtaken even with the speediest camel. He avoids obstacles by quick turnings, and the prevailing notion that he can change his direction only very slowly is manifestly erroneous. Moreover, he never pursues human beings shoreward, but invariably flees from them toward the water at the first alarm. After sundown the crocodiles leave their resting-places and betake themselves noiselessly to the water to hunt for fish until daybreak. With the help of their powerful tails, which they use as rudders, they move through the streams lightly and with great speed; and the creatures which are apparently so stupid and helpless seize the scurrying fish with great dexterity and quickness. Whoever has observed them in this pursuit has found in them nothing of the awkward sluggishness which tradition has ascribed to the crocodile. Though fishes form the main supply of their meals, these huge, lizard-like creatures also pursue larger prey. They mark the spots where animals come to drink or natives approach the stream to draw water. To these places the crocodiles repair and wait motionless beneath the surface of the water. As soon as the prey makes its appearance they swim noiselessly and swiftly beneath the water, fling themselves upon it with lightninglike

speed, draw it into the depth, and devour it or tear a limb from it at their leisure. In this way they capture goats, sheep, dogs, asses, horses, and camels, and occasionally human beings. Even the birds are not exempt from their cruel trickery.

Among themselves the crocodiles are generally peaceful, but when they are hungry and no other food is to be had, they sometimes devour the young of their own kind. At the pairing season, however, there are often fierce quarrels among the males. They try to seize and dismember each other with their powerful jaws (an endeavor which is shown in our picture). The heavy blows of their tails lash the waters so furiously that all living creatures flee from the range of this battle of the giants. At the pairing time the crocodiles, particularly the males, emit a pungent odor of musk. The female lays from forty to fifty eggs of about the size and shape of the goose egg. These are deposited in a deep ditch and covered over with sand. The mother remains near by and guards the eggs carefully. When the young are ready to creep out she breaks the shell, because the offspring are not able to do it for themselves. How the mother knows the right moment for this operation was a profound mystery in former times, but a natural scientist has observed recently that the young crocodiles, when they are ready to leave the egg, utter a quacking sound, and thereby summon the watchful mother to her duty. The crocodile is of no commercial value to civilized man, but the natives esteem its flesh, fat, and eggs as delicacies, and the musk-glands are highly prized by the native women, who use their contents as an ointment for the hair and body. The natives kill the crocodile with a javelin tipped with an iron barb, but the more effective weapon against him is the bullet, which readily pierces his armored hide. The assertion that the animal cannot be killed with firearms, because the projectile rebounds harmlessly from his thick skin, is therefore erroneous.



A Duel between Crocodiles.





## The Apteryx and the Dingo.

WHEN the evening shadows fall on New Zealand and Van Diemen's Land, a grotesque life begins to stir in the forests of those distant regions. Strange forms leave the burrows in the earth in which they have dreamed away half the day. They are the snipe-ostriches, or apteryces. The long, snipelike bill of the apteryx and his broad foot with three toes in front and one behind growing a little higher than the rest indicate that the creature is a bird, although in other ways it bears but little resemblance to a bird; for the plump body, as large as that of a hen, seems at first sight to be covered with a bristly fur, and there is no trace of wings or tail upon it. But if we succeed in getting hold of one of these animals, we shall discover on closer observation that the covering of its skin is made up of closely growing feathers, among which, quite concealed, are two small, flaplike wings. If we wish to observe the apteryx in its nightly rambles, we must seek the wooded mountain. A mother apteryx and her young are an especially interesting sight. She comes along slowly, with a broad stride. Her neck is bent, and now and then she pokes her long bill into the ground, then withdraws it slowly, almost always pulling a worm out of the ground with it. Then, throwing her head back with a quick jerk, she swallows her prey or gives it to her little ones. When the bird withdraws its beak from the ground, it makes a peculiar sneezing noise, which is probably

the result of its efforts to be rid of the earth which has covered its nostrils near the tip of the beak. But while the mother is busy seeking food, and her young have perhaps strayed away, a dog's head with ears erect becomes visible and peers over a neighboring tree-stump with wide-open jaws. Without a sound the animal glides forward upon its long, slender body, which is marked with numerous black stripes running from the back to the stomach. This is the dingo, a hungry and rapacious beast of prey. The result of its attack cannot be in doubt. The surprised apteryx, which can neither fly nor defend itself, but must save itself by running, will soon be caught and torn to pieces by the nimble dingo; and if the young in the meantime have not found a safe hiding-place, they also will fall an easy prey to the freebooter. Besides the dingo, the apteryx has also to fear man and his domestic animals, such as the dog and the cat. The apteryx is hunted for its savory flesh. Skeet relates that for a long time he and his people subsisted solely on the meat of this bird, which compares favorably with the tenderest beef. Because of its value as game, the apteryx has long since disappeared from inhabited neighborhoods. Little is known concerning the reproductive habits of this curious bird. Hunters have observed that the female builds the nest, and lays into it two unusually large eggs, which the male hatches out. In what condition the young leave the egg is not known, as no apteryx has ever been hatched in captivity. To judge from the size of the egg, however, the young are probably well developed when they leave the shell.



Apteryx threatened by a Dingo.





## The Anaconda Fishing.

THE anaconda (the Latin name given it by science is *Eunectes murinus*) is closely related to that giant snake, the boa-constrictor. It is a native of tropical South America. It reaches a length of twenty-three feet, and the color scheme of its skin is regular and distinct; the ground color of the back is a black olive-green, that of the back of the head an olive-gray, approaching yellow on the borders of the jaws. The skin is striped and dotted, with dark brown stripes and round or oval spots distributed in a more or less regular design all over the body. The anaconda lives in the swamps, as near to the water as possible, or in the water itself. It can remain under the water for a very long time, swims excellently, and often floats with the current for a long distance. On the other hand, it also likes to lie upon a bank or a rock, or half buried in the hot sand, there to sun itself and lie in wait for its prey, which consists of the four-footed animals that come down to the water, such as the tapir and the agouti, as well as ducks and other birds. For the large fish it watches from the bank, or its powerful body coiled upon the bough of a tree over the water, darting upon its victim with a movement of lightninglike rapidity. The reptile grasps the fish with its mouth and breaks the backbone by twisting a coil about it; then it proceeds to swallow its catch. Such a proceeding is shown in our picture.

The movements of the anaconda in the water are exceedingly nimble and graceful, but upon land the serpent is slow and

well-nigh helpless. Its greed, however, goes with it when it is on the land; and if an anaconda has once been in the neighborhood of a plantation or barnyard in which it has seized a duck or a hen, it generally remains near by until it has devoured all the rest of the flock. For this purpose it lies among the reeds of a neighboring swamp or in some crevice or ditch. In Guiana the planters kill the anaconda with buckshot, which, by shattering its backbone, paralyzes the animal and makes it helpless. Whenever the Indians can get near enough to it they shoot it with arrows. The anaconda is so tenacious of life that its body continues to move long after the head has been severed from it, the skin drawn off, and the entrails taken out. The Indians and Bushnègros eat its flesh, which is very white and succulent. They use its fat as a healing ointment, and prepare a tough leather out of its skin, which the whites use for horse-blankets, boots, and bags. The natives also eat the soft-shelled eggs of the anaconda, considering them a great delicacy.



The Anaconda fishing.





## Sea-elephants.

THE sea-elephant, or *Cystophora elephantina* as his scientific name runs, is one of the rarest and most interesting among the seals. Formerly it inhabited the coasts of Patagonia, California, and Tasmania in great herds. To-day, because of the thoughtless and pitiless persecution to which it has been subjected by the seal hunters, it is to be found in decreasingly small numbers only on the almost inaccessible cliffs of the Arctic Ocean. The sea-elephant is larger than any of the rest of its kind. Full-grown males have been known to reach a length of more than twenty-five feet and a weight of ten thousand pounds. The wide, globular head of the male ends in a trunk snout, at the end of which are the nostrils. When the animal is at rest the snout hangs over the mouth, but when it is excited the formation becomes inflated and looks somewhat like a sausage. The eyes are round and full, and are surrounded by two rows of hairy feelers, which also grow sparsely upon the lips. The stumpy fore flippers are equipped with short but sharp claws, while the toes of the hind flippers are nailless. The short, stiff fur is of a uniform brown or grayish blue. The female is perceptibly smaller than the male, and lacks the nasal ornaments that adorn her lord. The sea-elephant is a good-tempered creature, and, like the rest of its kin, moves about awkwardly enough on land, but is very agile in the water. To the last degree indifferent to its own kind and

surroundings, it swims about in a leisurely way in pursuit of fish and the lower orders of sea life, and only the stress of pairing time arouses it from its stoical quiet. It mates between September and January, during which time the male fights his rivals for the choice of a companion among the females. Ten months after pairing the female gives birth to her young, which, even at the time of birth, average five feet in length and nearly ninety pounds in weight. They are tenderly nursed by their solicitous mother until they are about eight weeks old.

The hunt for the sea-elephant is as easy as it is productive, when the herds are numerous. With cries, shots, and all manner of other din, the hunters in their boats drive the frightened animals on shore, where, armed with clubs, spears, and firearms, they senselessly exterminate the defenceless creatures, sparing neither young nor old, male nor female. Oil is made of the blubber of the sea-elephant, and its salted tongue is esteemed a rare delicacy. Our illustration shows a herd of sea-elephants which has established its camp upon the cliffs of the seacoast near its native element. Here the animals repose in peace and comfort.



Sea-elephants basking in the Sun.





## Life beneath the Sea.

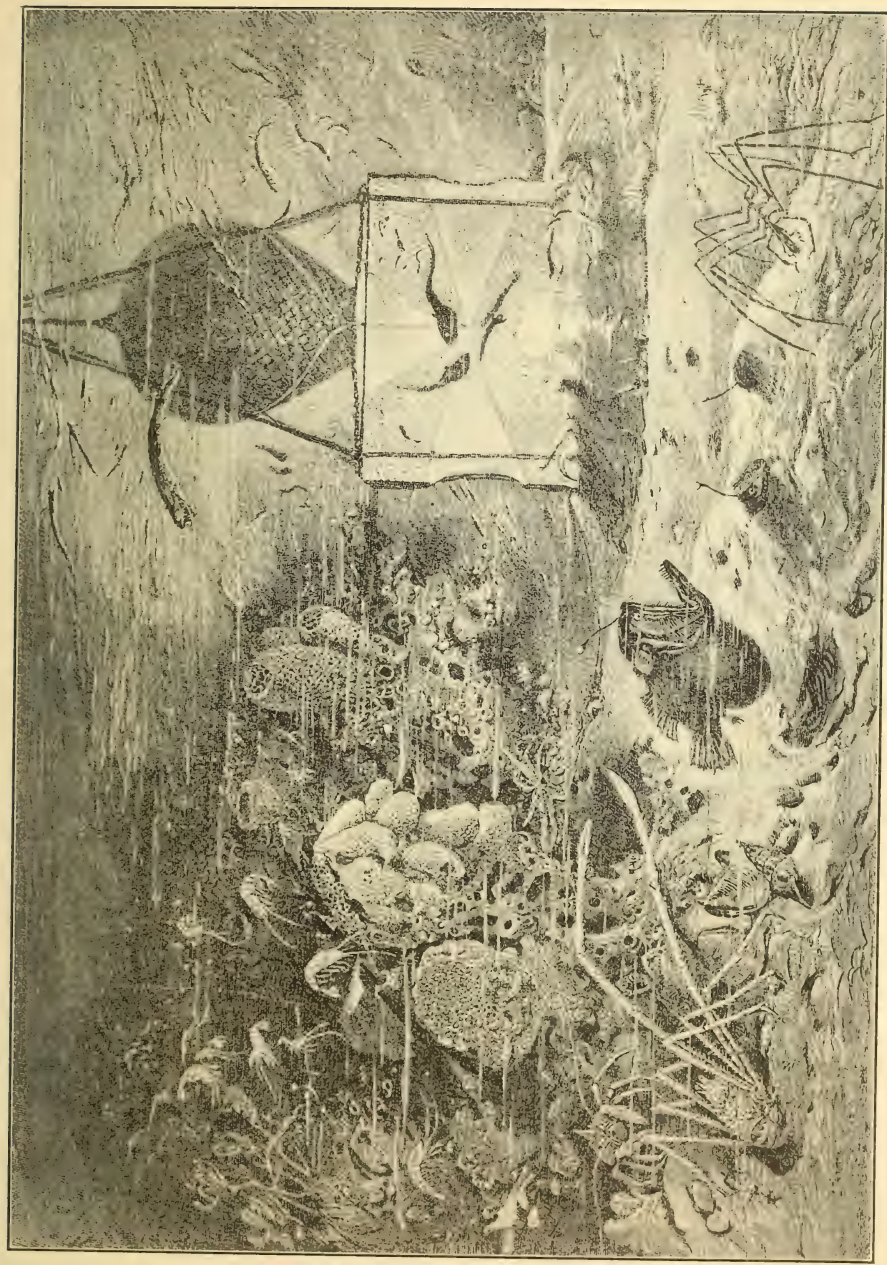
THE deep-water drag-net which is lowered upon the bottom of the sea to rob it of some of its living treasures, is an extended, boxlike trap of plaited wire, equipped with funnel-shaped openings in the sides. These afford an easy entrance for the animals which the net is designed to capture; yet, when an unhappy creature has once entered the four-cornered space, it seldom finds its way out again, but is held a prisoner by the closing up of the narrow entrance.

An electric glow-lamp gleams inside the trap, sending out shafts of light through the dark water. The electricity is generated in a chemical battery in the bottom of the apparatus, and a balloon is fastened above it to counteract the enormous pressure of the water at great depths. The metal case which holds the battery is connected by a tube with this air chamber. The latter is compressed by the increase of pressure, and a part of the air is thus forced into the protecting box of the battery. The application of this mechanism to the purposes of science is credited to the reigning prince of Monaco, an enthusiastic deep-sea explorer.

When this apparatus is lowered to the muddy bottom of the sea, the light of the electric lamp discloses great masses of coral and sponge, but the mechanism is not designed to disturb these. If the operator wished to collect them, he would have to use a drag-net fitted with sharp cogs, which are contrived to cut

away the animals clinging to the bottom and bring them to the surface. But among the corals and sponges there live and move many strange animals of curious forms and habits. As the drag-net sweeps through the water, it falls upon strange little crabs, looking for all the world like shrimps, with their great, long feelers. Out of the dark recesses appear fishes which have been attracted by the light. They venture nearer and nearer the wonderful gleam, and soon one of them has found its way into the tempting prison, soon to be followed by others. When the captives are examined, some marvellous forms of marine life reward the efforts of the scientist.

While some fishes dart hither and thither through the water for their prey, others lurk in the mud; but the electric light exercises its fascination even over these latter creatures, and a few of them forsake their hiding-places and swim toward the gleaming point. One of the most extraordinary creatures that is caught in the deep-sea drag-net is a fellow with long, wisp-like legs, strutting about like a spider. The legs of this animal are about as thick as ordinary straw, and its body of about the same thickness as that of its weaver cousin, the spider. But its size over all reaches a number of decimetres, whereas its land counterfeit measures only a few centimetres in length. Science does not furnish us an explanation of the salamanders and dragons with which the ancient poets have peopled the deep, but the study of the peculiar animal world which exists fathoms below the ocean has a fund of interesting facts to disclose. Many different methods have been devised to place the scientists in close touch with these marvels, and among the devices employed for this purpose the electrically lighted sea-net is one of the most original and effective.



An electrically lighted Drag-net in the Deep Sea.





## The Condor and the Llama.

THE condor sways a lordly rule in the high mountains of the South American Andes, from the equator to the 45th parallel, south latitude, in the same way as his very distant cousin, the golden eagle, holds sway over the loftiest mountain-tops of America and Europe. The condor is the largest of the combed vultures known to science as "*Sarsorhamphus gryphus*." Much has been written during the past few decades about this, the mightiest bird of prey. In length he averages over forty inches and his wings measure as much as ten feet from tip to tip. His main color is black with a dark, steel-blue glint, and a strip of white through the middle of the wing, while the back of the head, the breast and throat are dark gray and always bare. The wrinkled skin on both sides of the neck in the male is a bright red, the neck a darker shade of the same color, and the crop almost a pink. The red flesh-comb on the head and the velvetlike collar distinguish the condor quite sharply from other mountain birds. His wings are very strong, his swiftness of flight extraordinary, and the sharpness of his eyesight wonderful. Like the rest of the vultures, he lives chiefly on carrion, but when no carrion is to be found he pounces upon the herds and works great havoc among the lambs, sheep, goats, and calves, as well as among the different kinds of llama, or South American camel. The natives of the localities in which he lives have, therefore, no mercy upon him, and employ all sorts of

devices to destroy him. It is almost inconceivable how the condor, sweeping about at so great a height that the naked eye can scarcely see him, can descry a dead animal in the remotest valley. Even at a greater distance can this lordly scavenger follow with his glance a fellow-wanderer whose presence the human eye can hardly detect even with the aid of a telescope. It often happens that the carrion which has attracted the condor from his dizzy heights has been placed there by an ingenious hunter to entice the mighty bird within reach of his weapons. When the condor has espied an animal which he desires to capture, he either flaps his wings about the head of his victim until the latter is so frightened and confused that it plunges over a precipice, to be dashed to pieces in the depths below, or he pounces down upon his prey, seizes upon it with his great talons, and pecks a hole through its head. The swift-footed llama is especially exposed to the ravages of the condor. Our picture shows a powerful condor which has harassed one of these useful domestic animals until the poor creature has plunged to the bottom of the precipice. The bird then hastens to despatch his prey and to gorge himself with the carcass. In the distance, however, a robber companion has already appeared, and our condor must share his prize with the newcomer or risk a battle.



Condor capturing a Llama.





## The Giant Salamander.

THE salamandridæ, with their lizard forms, flat heads, sharp, protruding eyes, their moist, cold bodies, covered with glands and warts, their life in the water, in the darkest crevices of mysterious caverns, have been for generations the object of the superstition of mankind. The silliest stories have been told of some kinds of salamanders. Pliny said: "The salamander can destroy the human race. When it climbs a tree it poisons all its fruit; if it falls in a well it poisons the water. Indeed, if bread is kneaded upon a board which it has touched with its feet, whoever eats it will be poisoned." Similar stories were generally told of the salamander during the Middle Ages, and even to-day the animal is regarded with terror by the ignorant.

The fire salamander is found in great numbers in Central Europe. He is colored black and flecked with gold and yellow spots. Among the Alps, up to the very snow line, is found the Alpine salamander, a small, unspotted animal of an average length of three and a half inches. The most conspicuous member of the whole family is the Japanese giant salamander (*Megalogatrachus giganteus*), which sometimes exceeds thirty inches in length. This interesting animal is pictured in our sketch. F. V. Siebold, a well-known German scientist, discovered the giant salamander upon the island of Nippon in Japan, but precise accounts of the animal were not furnished until later

by Rein and Roretz. According to these authorities the giant salamander lives in the southern parts of the island of Nippon in clear waters and springs, and the Japanese call it "haze-koi." The color of the creature is a muddy light grayish brown with darker spots. Its young are cinnamon colored with their skin free from warts. The larger and older the animal grows the more uneven becomes its skin, and the more prominent the spots upon it.

The giant salamander is an extremely lazy fellow. Under normal conditions he lies motionless upon the bottom of the basin in which he lives, preferably in the darkest part of it. From time to time he raises his round nose out of the water to breathe, and then sinks back to his interrupted nap. His diet consists of fish, frogs, and worms, which he snaps up as they swim unsuspectingly by his motionless nose. After he has had a sufficient meal, he frequently goes hungry for a whole week at a time rather than trouble himself to obtain another supply of provisions. The Japanese catch him with fishhooks, or drag him from his lurking place after having drawn off the water. His flesh tastes well and is a staple on the market. The giant salamander, like the rest of his kind, is very tenacious of life. He can remain out of the water for a long time, and is hardly injured by freezing temperature.



The Giant Salamander fighting.





## Hunting with the Chetah.

THE province of Central Asia was famed as a hunting-ground in the earliest times known to history. Quail, rain piper, snipe, black hares, and wild boars, besides herds of light-footed antelopes and elusive stags, are even now scattered in great numbers throughout that country. The Indian princes are passionate hunters, and especially do they love the chase of the antelope, in which they use the chetah much as other huntsmen use the dog. This interesting beast of prey is somewhat like a cat and somewhat like a dog. He has a head and a long tail like those of the cat, while the rest of his body, as well as his long legs with their outstretched claws, though movable like those of the cat, resembles that of the dog. In the appearance of his face the chetah recalls the cat, but in his eyes shines the good-nature of the dog. The beast is therefore easily tamed and trained for the purposes of the chase. Joseph Barboro saw, in 1474, a pack of a hundred head of such chetahs owned by a prince of Armenia, and even to-day the Hindoo noblemen expend no insignificant sums of money upon their chetah kennels. An American traveller recently attended a hunt with the aid of chetahs at Delhi. The animals, with eyes bound, were brought upon a two-wheeled ox-cart, to which some of them had been secured with a cord, while others were confined in wooden cages. Then they were taken to the stamping-ground of the antelopes, which had been previously reconnoitred in order to ascertain the strategic possibilities of the place and the

probable whereabouts of the game. The hunters try to get as near the herd as possible. If this movement is successful, a halt is made, the chetahs are set free, and the bandages are removed from their eyes, as is shown in our picture. As soon as the four-footed hunters see the antelopes, they crouch close to the ground, creep forward against the sweep of the wind, serpentlike and silent, but with wonderful quickness, taking advantage of every bush, every tuft of grass, and every mound of earth as a screen to conceal their approach. In the meanwhile they watch intently every movement of the game. So long as the leader of the herd continues on guard, with head erect, the rest of the antelopes remain at their ease. When the chetahs have come within striking distance, they rush forward with mighty bounds upon the terrified animals, spring upon their necks, bite through their throats, and suck their blood. When the hunters come up, they restore the bandages to the eyes of their chetahs, and then cut off the heads of the fallen antelopes and catch their blood in wooden bowls. By holding the blood-filled vessels before the chetah they finally succeed in getting the animals away from their prey, and tie them to the cart like so many dogs. After the game has been taken care of, the hunters move on in search of a fresh herd. Although the murder of the graceful antelopes by their cruel enemy is shocking to Christian sensibilities, history has many recorded instances of the use of the chetah by European princes. As far back as 1640, Leopold I. of Austria received as a gift from the Sultan of Turkey two trained chetahs, with which he often hunted.



Hunting Antelopes with Chetahs.





## The Climbing Kangaroo.

“**A**LL observers agree,” so says the great naturalist Brehm, “that no more remarkable sight can be conceived than a climbing kangaroo, which moves with agility among the branches of trees and exhibits almost all kinds of climbing that are observable among the mammals.” One observer declares that when he first saw a climbing kangaroo, — it was in the London Zoölogical Gardens, — he could not for a long time withdraw his eyes from the queer spectacle which the great, awkward beast presented as it jumped about, high among the branches. To all outward appearances the climbing kangaroo is not unlike its well-known cousin of the Australian plain, and yet in some respects it is an altogether unique animal. The director of the Berlin Zoölogical Gardens, Dr. Heck, succeeded in securing several of these rare creatures. For some time they lived in the monkey house. The curiosity of the crowd was for some time divided equally between them and the orang-outang, which was at that time one of the greatest rarities in zoölogical collections. The climbing kangaroos are generally very sleepy and sluggish fellows, and the scientist is compelled to remain at his post for a long time before he can get an opportunity to see them move. Toward evening, however, they become lively and bound from bough to bough or climb up the trunks of the trees with great rapidity. Rape, potatoes, and rice are their chief articles of food when in captivity. The specimens at Berlin have a particular scientific value, because they belong to a

family which was discovered only recently. There are but few known data about the life of the climbing kangaroo. It is not known, for instance, what they feed on in their natural state. The indications are that they eat various fruits, buds, and perhaps green twigs and leaves. The climbing kangaroos, it is said, become attached to some particular tree and spend their days in slothful ease among its highest branches. At night they leave their homes and descend to the ground in large numbers. The climbing kangaroo is valuable on account of its excellent flesh and is hunted with bloodhounds. When the hound has discovered the tree-home of the kangaroo, the hunter can count on results almost with certainty, for several of the animals are generally found there fast asleep. A native climbs up, seizes the nearest creature by its long tail, and kills it with a club, or else drives it from the tree, thus putting it at the mercy of the dogs.

### The Striped Adder and the Frog.

**A** WELL-KNOWN animal painter here places before us, with wonderful truth to nature, his sketch of an interesting scene from the lower animal kingdom, — an illustration of the fact that even there, as everywhere else, the struggle for existence is constantly going on. The picture shows us a striped adder, which has caught a frog and is preparing to devour the poor, trembling creature. Frogs are, in fact, the chief prey of the otherwise harmless striped adder, which is among the most common species of serpent. Linck has described, in a most vivid manner, the course of such a hunt: —

“Fully aware of the intentions of the nearing enemy, the



An Adder catching a Grass Frog.

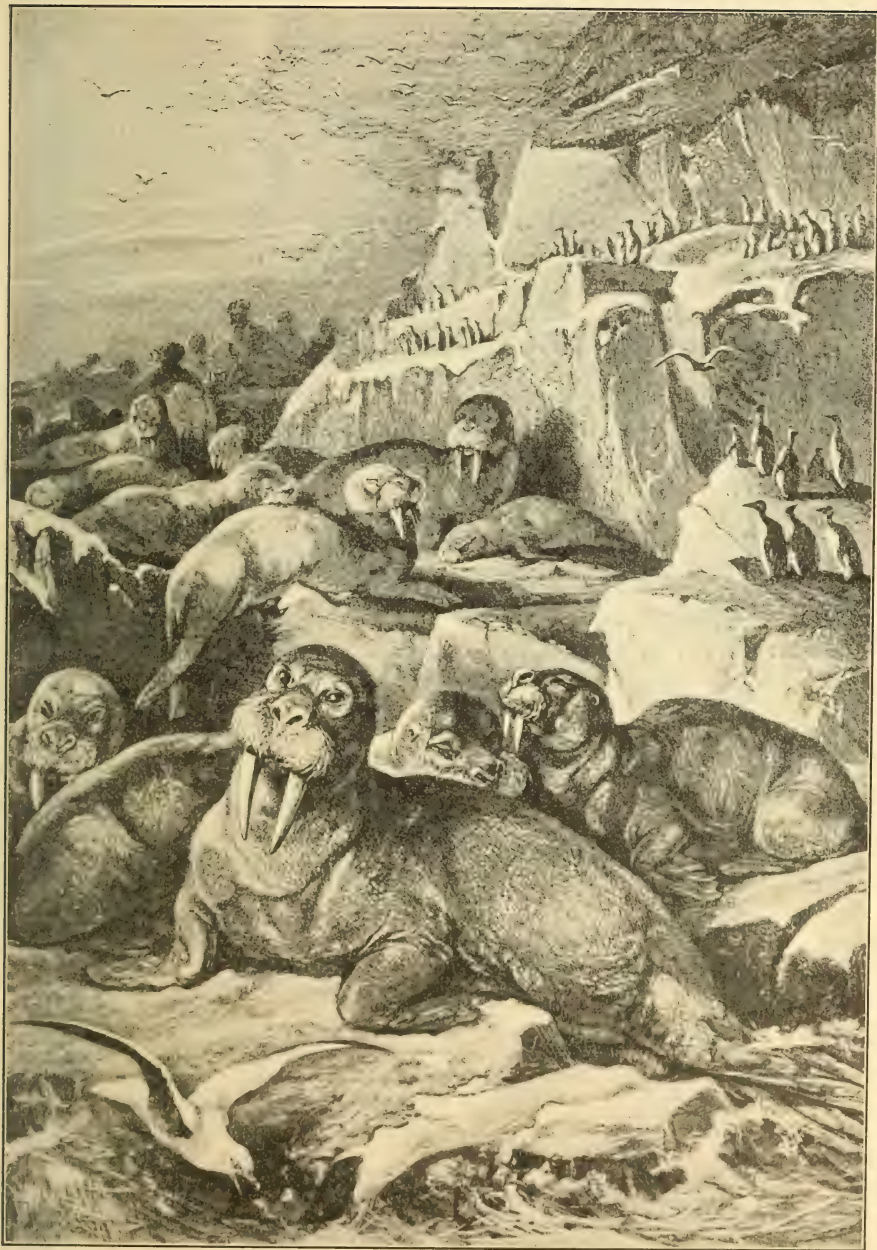




frog notices in due season the coming of the adder, for he recognizes his grim enemy by instinct, and sometimes by the recollection of previous experiences with the creeping hunter. The frightened animal tries to run away from his pursuer, but discovers, as all hunted animals generally do, that the gap between him and the enemy that is pursuing him only closes up the faster for its futile struggles. The poor frog is benumbed with terror, so that he seldom hops, but seeks safety in running, and when he hops at all it is only in short, jerky jumps. Escape would be easy for him if he could make the mighty standing springs by which he propels himself over the ground with great speed under ordinary circumstances. At this time the hunted animal utters a strange cry of anguish, which has no resemblance whatever to the sounds which we are accustomed to hear from frogs, and which might proceed from any creature but a frog. It is like the trembling, prolonged bleat of a lamb, but it is more drawn out and falls upon the ear as the very voice of despair. Such a pursuit seldom lasts more than a minute, and then the striped adder seizes his prey and proceeds to devour it. The process is a peculiarly shocking one. The serpent does not wait until he has killed his prey, but forces it down into his stomach alive. One hind leg follows the other, and the snake draws the unhappy frog slowly down his throat, while the poor thing struggles and croaks miserably so long as he can open his mouth."

## The Walrus.

THE greatest, most powerful, and most interesting of all the varieties of the seal (or *Pinnipedia*) is the walrus (whose scientific name is *Trichechus rosmarus*). The walrus is now to be found only in the Polar seas and the shores adjoining. The whalers sometimes capture this great animal as it swims, but more often as it lies in large numbers on the steep ice-covered cliffs. It reaches a length of about fifteen feet, and specimens have been known to weigh as much as fifteen hundred pounds. The long body of the walrus, like that of the sea-dog of the northern coasts of Europe, is thickest in the middle and tapers almost to a point in the rear. The great limbs of the animal protrude from its body almost like flaps, but the joints in its fore legs, like those of its hind legs, are easily distinguishable, and its five-toed, finlike feet end in short, thick claws. Its enormously thick hide, nearly devoid of hair, is wrinkled and creased, and the tail looks like a mere overlapping of the skin. The most characteristic feature of the walrus is its small round head, with its short and broad snout, ending in fleshy and puffed-out lips. At both sides of the mouth are rows of round, horny bristles, growing close together and varying in number. The walrus uses his jaws in a very remarkable way. The six front teeth and the two lower pointed teeth are entirely lacking, and instead of these it has two monstrous tusks nearly two feet long and projecting far out of the mouth. The color of



Walrus sunning themselves.





this peculiar sea monster is a leather-brown which sometimes passes into gray. The male and the female are very much alike in coloring and form. For many centuries past the walrus has been industriously hunted, for the carcass of the animal is very valuable, both on account of the oil that it yields, and for its heavy and hard tusks. Although the walrus is a powerful swimmer, it seldom goes at a great distance from the seacoast, and the whalers generally regard its appearance as an indication of the nearness of land. The food of the animal is so uniform in its nature, consisting entirely of fish, sea-mussels, and the like, that the walrus itself is exceptionally steady in its habits. When it is not searching for food, it lies for hours and days in the same spot, upon an ice-floe or a steep cliff. Its only enemies are the bear and the whale-hunter, and with both of these it wages bitter war. It often happens that the hunters barely escape with their lives from the enraged beast, which, in spite of quick-firing arms and powerful spear-thrusts, often seizes and overturns a boat. The ruthless advance of the whalers has gradually driven the walrus farther and farther north. At the beginning of the century herds of a hundred head or so were plentiful in Spitzbergen and Greenland, and indeed no further back than twenty years ago it was one of the most numerous oil-bearing animals of those regions. It is seldom seen nowadays, and doubtless the complete extinction of the species is close at hand.

## The Water Moccasin.

THE water moccasin (known to natural history by its scientific name of *Ancistrodon piscivorus*) is one of the most dangerous among the venomous reptiles of North America. It is a powerful serpent, nearly five feet long, and it lives in streams, lakes, and boggy moors. It is dangerous not only in the water, but on the adjoining land as well. The water moccasin apparently takes pleasure in the act of killing, for it bites even when satiated, and menaces not only an assailant, but attacks any living creature that may be in the vicinity of its gliding body. It is, therefore, the particular terror of laborers who work in swampy places, such as the rice fields. The venom of this serpent is frightful in its effect. It kills warm-blooded, as well as cold-blooded, creatures, and even some species of poisonous snakes have been known to succumb to it. Fish and frogs are the favorite food of the water moccasin; but while trapping these creatures, the squirming hunter is sometimes caught in a dilemma, as is shown in our picture, for the serpent has already seized the fish in the water when it catches sight of a frog. Thereupon it deserts the old prey, and with unerring aim attacks the new. The general color of the water moccasin consists of brown stripes upon a light ground, but it often varies; for, like other snakes, water moccasins adapt themselves to the color scheme of their surroundings. Thus there are black, earth-brown, chestnut-brown, and olive-colored varieties.



Water Moccasin Snake frog-hunting.





The water moccasin can live on dry land, and is a prolific breeder. Even in captivity he does not lose his murderous instincts, and poisons in a short time any creature that may be placed in the same cage with him. The fierce rattlesnakes themselves do not escape its deadly bite.

## The Great Turtle.

**A**LMOST all the travellers of the sixteenth and seventeenth centuries who have published accounts of their discoveries in the Pacific Ocean dwell at length upon the strangeness of the Galapagos or Turtle Islands. Upon these islands the travellers found neither human beings nor any of the larger mammals, but in their stead a countless number of great turtles. Nowadays the animals are well-nigh extinct, and upon the Galapagos Islands, which now belong to the republic of Ecuador, there is to be found but a single variety of this mighty land turtle, — the Great Turtle, as it is called, — which is becoming rarer and rarer each year. When Charles Darwin visited the Galapagos in 1835, he found there a multitude of these animals, which were over four feet long, more than three feet in width, and almost three feet in height. He recorded his impressions of them in detail. The great turtle is brown, shading almost into black, and weighs two hundred and twenty pounds on the average, although some have been killed that furnished that weight of edible flesh alone. Those that live upon the plains feed upon the juicy cactus plant, while their friends of the moist highlands crop the leaves of various trees and browse upon whatever berries they can find. All of them love the water, and great numbers flock to the watercourses and disport themselves in the mud. In conse-

quence of the constant migrations of these animals to the running brooks upon the highlands, the island has been laid out in broad, well-beaten paths leading to the waters. Such a drinking place, in the immediate vicinity of a spring, is a remarkable spectacle. The clumsy turtles, as in our picture, with ponderous gait and outstretched neck, go craning toward the water, while others that have already quenched their thirst are turning away. As soon as the thirsty animals reach the spring they plunge their heads into the water and gulp away greedily, taking about ten swallows a minute.

It is a curious fact that while by day these animals are extremely timid, withdrawing their heads into their shells at the slightest alarm, at night they seem quite blind and deaf, and even the discharge of a shotgun does not make the slightest impression upon them. Even in the daytime, however, they are hard of hearing ; for the observer can walk up close behind them without alarming them. They are so strong that they can waddle about peacefully with a full-grown man on the back. But it is more difficult to maintain one's equilibrium upon the back of a turtle than upon that of a camel. The flesh of the great turtle is so desirable a delicacy that the species is now almost extinct.



Elephant Turtles going to the Water.



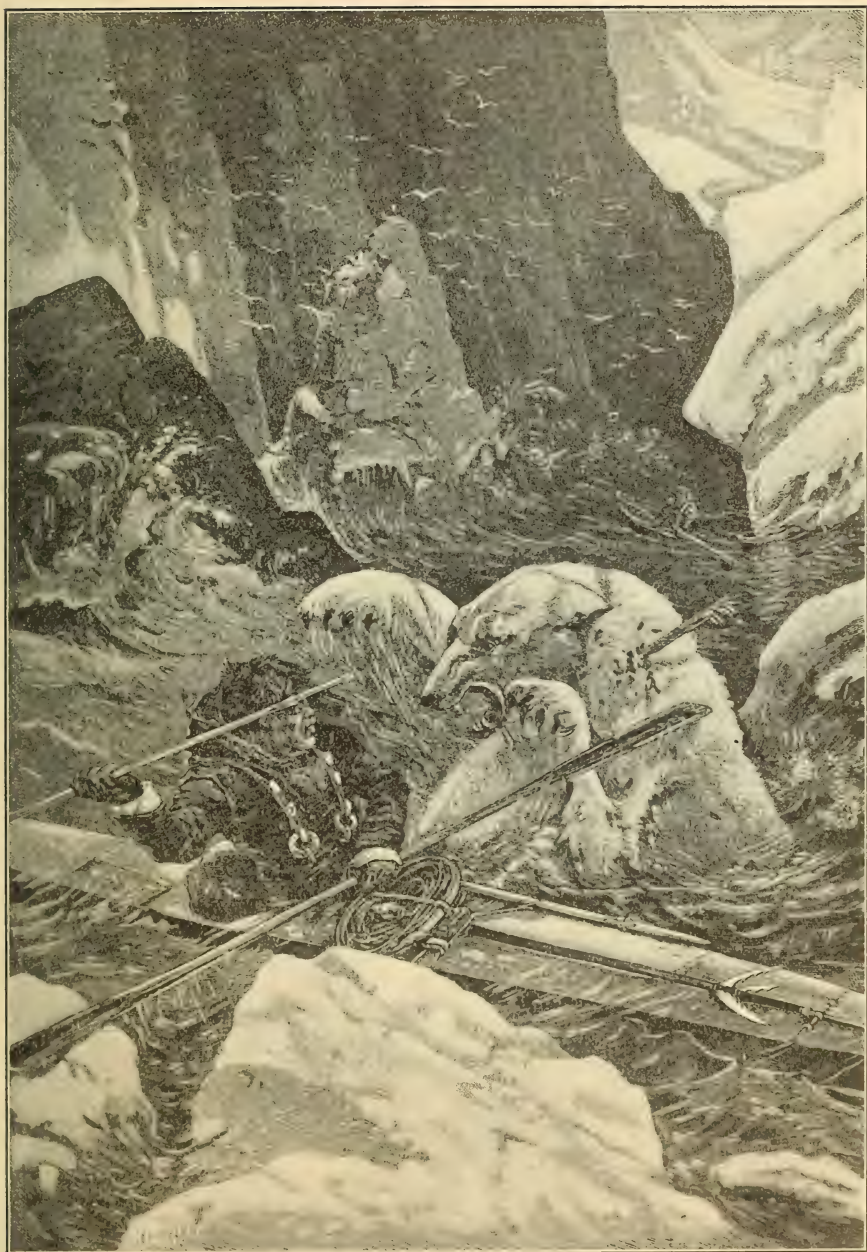


## An Esquimau in Battle with a Polar Bear.

THE Esquimaux, who dwell upon the sea-coast, in Greenland or on Hudson Bay, are essentially a fishing-folk. But during the winter months they depend largely upon hunting for their living. For the most part they capture seals, walruses, and narwhals, but when opportunity offers attack even the formidable polar bear, as in our picture. The white-coated bruin, who lives in the extreme north, is larger even than the grizzly; for the total length of the male is often seven feet and sometimes more. His weight runs from ten to fifteen hundredweight. The polar bear is to be found in the entire Arctic zone and the territories adjoining it, but is especially common upon the coasts of Baffin and Hudson bays, in Greenland and in Labrador. He is quite as likely to be met with upon an ice floe as upon dry land; he swims superbly, and remains in the icy water for hours without feeling any discomfort. His food consists of almost all the varieties of animals that frequent the land and water of his northern home, but the different varieties of seal are his favorite food, and he is so sly and active that he seizes these wary animals without very much trouble. In hunting the polar bear on land the Esquimaux build wooden huts from which they watch for him, or else they avail themselves of a bit of strategy. Bending a piece of whalebone about four inches wide and two feet long in the form of a circle, they cover it completely with seal fat and let it freeze. This contrivance, which looks for

all the world like a lump of fat, they then leave upon the ice, and disappear. When Master Bruin comes along he perceives the tempting object, smells it, and then proceeds to swallow it. After the fat has thawed in the warm stomach of the animal, the circle of whalebone, being released, springs apart and tears his bowels.

But the Esquimaux sometimes give open battle to the polar bear, either upon land or in the water. Their boats, or kayaks, which they manage with great dexterity, are some twenty feet long and less than two feet wide; they are made of light wooden frames, and covered with seal hide; they have a round opening in which the occupant sits. The course of this little boat is governed by a small paddle oar as wide as the hand at each end. Besides the bow and arrow, these polar hunters use a harpoon or spear as their weapon. The Esquimau in our picture is advancing boldly with lance couched against the savage polar bear that has suddenly sprung up against his kayak. The bears defend themselves with great courage and skill even in the water, and there are instances enough on record of such hunts that have terminated fatally for the hunters.



Esquimaux in Kayak attacked by Polar Bear.

L. & C.





## The Swan and the Fox.

IN the north of Europe, as well as in northern and central Asia, there lives the wild or singing swan, the *Cygnus musicus* of the naturalists, a beautiful, stately bird, only a little smaller than the tame or hump-backed swan. As a bird of passage the wild swan visits central Europe in October, and in March and April, and is to be found in great numbers on the German lakes throughout the winter. His customary winter home, however, is in the swamps and lakes of Greece and the greater bodies of water in the north of Africa and the south of Europe. He owes his name, the "singing swan," to the double-toned, beautiful, loud, and prolonged cry which he utters. This sound, especially if many of the birds are together, or are flying at a high altitude, resembles distant blasts of a trombone. In beauty of form and grace of movement, however, the wild swan is inferior to the tame variety. His body is more angular, and his neck shorter, than those of the swan with which we are familiar. His length of body averages about four feet, the length of his wings is over two feet, and that of his tail half a foot. In his northern home the singing swan is exposed to many vicissitudes. Not only man but many rapacious beasts hunt him or his young. The fox especially has a liking for the tender flesh of young swans, and when he has found the nest of a singing swan he circles around it and lurks about continu-

ally, watching his chances to seize one of the brood. That, however, is not so easy to accomplish, for the singing swan is the most vehement and courageous bird of all its kin, and, with the utmost daring and tenacity, the mother swan defends her nest, which contains from five to seven offspring.

She receives the fox boldly, and sets upon him so fiercely with heavy blows of her wings and piercing thrusts of her beak that she generally drives the intruder away in ignominy. Our illustration depicts such a battle between a mother swan and Master Reynard. Ordinarily, moreover, the father swan is not far off, and at the first call for help he hurries to his wife. Then the fox must quit the field unconditionally, and give up, for the time being, all hope of obtaining the coveted morsel.

## Hunting the Tiger with Elephants.

THE accompanying picture presents an oft recurrent and dramatic scene in East India, the wonderland of earthly splendor. The esteem for nature which characterizes the mind of the Hindu has moulded his entire system of worship. His religion bade him plant two trees for each one that he cut down, and forbade him to kill an animal wantonly. This habit of mind furnishes a partial explanation for the existence of so many thousands of wild animals in the very midst of the swarming population of India. The ravages of the tigers among the natives are an appalling feature of life in India. The Indian Blue Book of 1875 shows that thirteen villages, taking up a territory of 260 English square miles, were depopulated and made utterly desolate by a tigress. Again, in 1869, a tigress is said to have devoured 127 people, and the loss of life by wild beasts for a period of six years was given as thirteen thou-



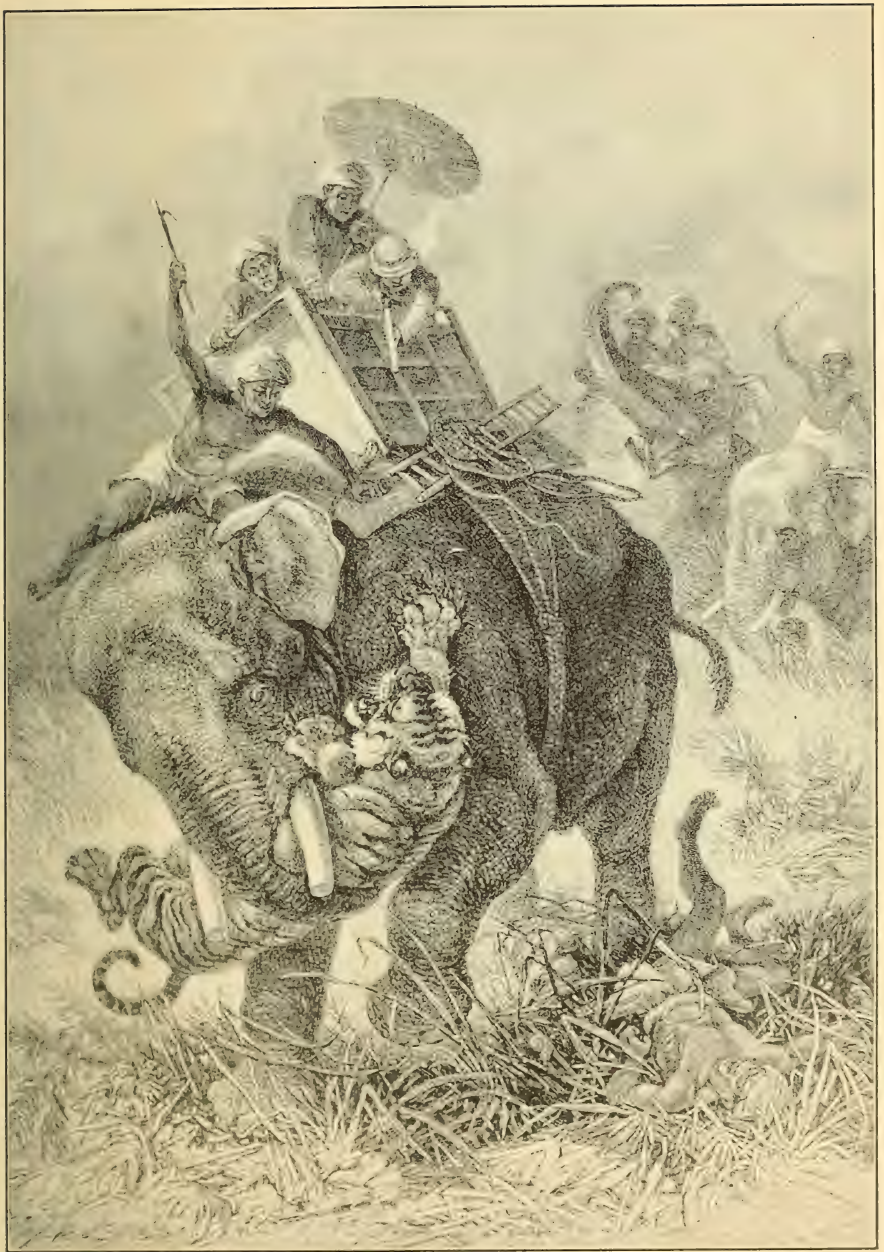
Swan in Battle with a Fox.





sand. Although, since the occupation of India by the British, the destructive firearms of the sportsman have already laid low thousands of tigers, they are still numerous in many localities, and years must elapse before mankind shall have accomplished a complete victory over these beautiful pests. A tiger-hunt with elephants is a great pastime of the native princes and wealthy English residents of India. Only the steadiest and best-trained elephants can be employed for this chase, for if the elephant should flinch before the rush of the tiger he would expose his riders to great danger. Ordinarily such hunts are conducted with great pomp, and many elephants are used in them. The elephants are driven slowly into the jungle by their drivers, who sit upon the necks of the animals. While all other wild animals that may be disturbed by the ponderous march of the party are allowed to escape unmolested, the hunters keep a close watch for the slow creeping of the tiger, whose presence is betrayed as a rule only by the movements of the tall jungle grass. Towards that direction the marksmen take careful aim in an effort to cripple the tiger at the first shot. In most cases, however, he is only enraged by the first wound, and springs desperately upon the back of the first elephant. The wounded brute often tears down one of the hunters, and then crouches down for a spring upon the driver, who seeks to defend himself with uplifted kris. But the sagacious elephant now winds his trunk about the tiger and tries to crush it in its powerful grasp. At this point the hunter, by a lucky shot in the eye, may render the monster harmless. This moment is a most critical one; for the nearness of the tiger, the swaying motion of the elephant, and the excitement of the situation are sometimes fatal to the hunter's aim. But even when the tiger has been mortally wounded, the infuriated beast, struggling with death, often succeeds in lacerating or biting

the elephant so painfully that the latter throws himself to the ground in an endeavor to crush his tormentor, and in so doing exposes the hunter to a fresh danger. As soon as the elephant has succeeded in shaking off the tiger, he elevates his trunk and trumpets his victory to the world. This done, the knowing animal forgets his wounds, for the time being, and continues his demonstrations of joy over the inanimate tiger, turning the body over and over with his trunk. Unfortunately the hunting fever of English sportsmen has already partially exterminated the wild elephants in India and Ceylon, so that rigid legislation has been demanded for the protection of these useful animals.



A Tiger Hunt with Elephants in India.





## Saved.

THE accompanying picture reproduces a scene upon the great St. Bernard. A father and mother with their child are amidst the solitude of the lofty mountains, struggling toward a southern home, perhaps in the plain of Aosta. The travellers have left the last human habitation far behind them in the valley. The winds sing their thunderous song among the dizzy cliffs, and an autumn storm is raging on the mountain-tops. The blizzard, that frightful spirit of the mountains, rises before the wearied strugglers. From a hollow of the mountain comes a dark cloud, discharging a heavy snowfall upon the path. The gale tears and rages so violently that the poor travellers cannot get their breath, and the cold pierces them to the marrow. Presently the pressure of the wind becomes somewhat abated. An hour longer, and the safety of the mountain refuge will have been reached. But the fury of the storm is revived again and again. The child whimpers, "Mother, I'm tired." The dangerous thought creeps upon the tired senses of the parents, "Let us rest a little." They stop, and, overcome by sleep, sink down upon the snow, and presently the storm smothers their last sweet dream of home. It is mild and painless — this approach of death upon the snow-covered mountain-side. But the exhausted ones will awake to life again. As soon as the blizzard or the avalanche begins to rage in the Alpine heights, the zealous monks of St. Bernard, with

their faithful dogs, are on the way to save the unhappy travellers that may have been overcome by the storm. The animals, with their wonderful sense of smell, seek out the victims, be they buried ever so deep in the snow. They scrape up the white pall until they have disclosed the insensible human being beneath, and then they lick the sleeper warmly and caressingly. Presently, with returning life, the traveller awakes and feebly grasps the collar of the faithful animal, which joyously announces its find to the rescuers by means of loud and prolonged baying.

Touching tales have been told of the devotion of the St. Bernard dogs, and many poets have lauded their deeds. Mankind will remember with gratitude the dog Barry, which saved seventeen travellers from imminent death, and perished upon its last errand of mercy. The person whom it had rescued mistook it for a wolf and sent a bullet into its heart. For over ten centuries have the monks of St. Bernard carried on their great work of mercy. In the past twenty years much has been accomplished to lessen the need of their labors; but from time to time the fearful tales of the past are reënacted, to be met with the same heroism and devotion. During the summer many tourists travel over the great St. Bernard, and according to their custom the monks place food and drink before them free of cost; but few of the travellers fail to remember generously the great work for humanity to which the monks and their dogs are devoting themselves, now as in the past.



Saint Bernard Dogs rescuing a Snowbound Family.





## The Shrike.

ON a beautiful spring morning we take a path that leads us through field and wood, across meadows and over hills.

We wish to see boundless Nature in all her royal beauty. Suddenly, on the border of a little clearing, we come upon an extraordinary scene. Impaled on thorns are a lot of beetles, grasshoppers, butterflies, and other large insects; even reptiles, such as small frogs, lizards, and other similar animals, are thus discovered. It is the butcher shop of a singular bird. For it is a remarkable peculiarity of the shrike, or butcher-bird, that he impales upon thorns in the neighborhood of his nest whatever part of his prey he does not at once consume, whether it be a blue-bottle or a beetle, a fly or a mouse, a larva, a fledgling, or even a full-grown bird. The butcher-bird hunts industriously all day long, and, as he has not a particularly voracious appetite, he quickly impales whatever comes under his beak. In fact, it appears that he hunts more for the pleasure of killing than for profit.

There are many kinds of butcher-birds, ranging in size from a sparrow to a thrush. They are an odd variety between the birds of prey and the finches, and are related more or less closely to both. They comprise a family of many varieties and are scattered all over the world. As a rule the shrikes are beyond the protection of the law, and may be killed at all times. It must be admitted that they have deserved this

severity, but the little red-topped shrike should be excluded from that fate, because he is a harmless bird and lives only on insects. While we are reflecting upon these things we have wandered farther away from the thicket, over the meadow, and to the edge of the forest. Here we must sit and wait patiently for the red-backed fellow. With the increasing heat of noonday a stillness has come upon the scene, and only the chirp and buzz of insects is to be heard. Then suddenly there comes upon the ear, in a luxuriant wave of sound, the full, clear jubilee of the thrush, the sweet lullaby of the meadow-lark, intermingled with the trembling note of the finch, or the call of the black-backed hedge-sparrow, the merry strophe of the yellow mocker, and, last of all, the rich, mellow lilt of the linnet. Among these bird voices is the long-drawn cry of the oriole, the echoing "Hupp-hupp" of the hoopoo, and the "pick — per — pick" of the quail. The uninitiated seeks in vain for the birds that have uttered these sounds. As a matter of fact they all come from the throat of the red-backed shrike, which has been called the "mocker." But the rest of the butcher-bird tribe cannot be tolerated, because they destroy too many of the other denizens of the bird kingdom.



The Shrike and his Prey.





## The Black Gelada.

THE black gelada (known to science as *Theropithecus gelada*) is the great baboon of Africa. It lives in the lofty mountains of Abyssinia. Three or four males generally accompany a troop of thirty or forty females, with their young, and when full grown measure nearly three feet from head to tail. These baboons spend their nights among the crevices of the hills, from which they issue after sunrise to begin their search for food. They eat herbs for the most part, but they also feed on all manner of roots and many insects. In the foreground of our picture we see the earnest captain of the band, who, with his pet wife, has already arranged the programme of the day, his pitch-black face denoting plainly a preoccupied state of mind. With left arm raised in rebuke he shows distinctly the four sharply defined triangular spots on his breast and neck, which are either pale or quite blood-red, according to the humor of the animal. His better half is busily at work ridding the leg of her lord of the troublesome insects that have accumulated upon it, and is considering carefully the possible reprimand that may come to her if he is not satisfied with her work. In the meanwhile the infant is taking advantage of the opportunity to make a close study of papa's mighty tail, which apparently does not strike it as being in the right place. Directly behind the funny little fellow is the squat figure of the grandmother of the family. She has long survived her palmy days,

and with weary arms crossed upon her breast has fallen asleep, and is probably dreaming of "Auld Lang Syne." Farther back a daughter of the family, with her baby on her back, is searching for a cricket that has been chirping in the grass. Nearly all apes carry their young at the breast, but these animals that live wholly upon the ground have long ago reached the good judgment to carry their young astride of their backs in order to secure an unobstructed front view. When we observe apes in captivity, we find that their entire appearance makes an impression of the presence of a reasoning power. The eyes of the male blink hither and thither knowingly, apparently allowing nothing to escape their penetrating gaze, while the female has no time to look about her, being too deeply engrossed with the care of her young one, which climbs restlessly above the bars and is recalled or chided frequently by its watchful mother. The voice of the ape is a very interesting study, as it is extremely varied in its modulations, and furnishes the animal with a more or less well-defined substitute for a language, the meaning of which unhappily we cannot understand. The apes even have a human conception of the justice of punishment, and box the ears of their young or of weaker apes lightly or heavily according to the magnitude of the offence. They are very particular about the quality of their food, and arrange herbs in orderly bunches, plucking out and throwing away the unwholesome parts. If a spectator comes too near the cage of a Gelada in confinement, a blow from the hand of the big fellow generally warns him of his imprudence. The thoroughly independent and serious demeanor of these animals presents the suggestion that they do not need the attention of man, for they are self-sufficient to a degree, and resent undue familiarity with great vigor.



The Gelada, or Great Baboon of Africa.





## Eagle Hawk and Chameck.

THE primeval forest of the tropics is not limited to a few varieties of vegetation, but is replete with the greatest diversity of growing things, covered with thick clusters of the noblest blossoms, glowing with gorgeous colors. In the midst of this splendor the rays of the rising sun awaken the slumbering world and furnish a signal for a busy animal life. Flocks of parrots enliven the tree-tops and flutter away screeching at the slightest disturbance. A multitude of monkeys climb and spring from bough to bough, and one of the most interesting among them is the chameck, or spider monkey (*Ateles pentadactylus*). His lean body, long, thin limbs, and enormously elongated tail, together with his pale, senile face, give him a most peculiar appearance. The face and ears of the chameck are bare, his flesh is of the color of copper, and he is covered with a long-haired coat of glossy black. The movements and positions which he takes, with the help of his long tail, are very curious. He swings by the tail and reaches out after fruit; or while in this position the animal gives a swing that shoots him some distance to another bough. At times he sits by the hour motionless with his hands placed upon his back. It happens very often that death overtakes them in the midst of their pastime. Near by, on the very top of a dead tree, sits an eagle hawk watching for an opportunity to swoop down upon his prey. He has had his eye on the chamecks for a long time, but has bided his chance. Now

he unfolds his wings slowly and flies noiselessly toward the unsuspecting animals. One of them suddenly discovers the approach of the enemy, and sets up a loud screeching to awaken the others. With the greatest haste, but always with their long tails flung forward for use as a hand, they rush through the tree-tops in a scramble for safety. The distance between the pursuer and the pursued grows shorter and shorter, and ever more hasty the flight of the monkey; but gradually the strength of the frightened animals fails. In its confusion a chameck has missed its grasp upon a bough, and while it is preparing for a second spring the eagle hawk pounces upon his prey and bears it down upon the bough. With half-upraised wings and neck feathers bristling, the bird of prey kills his victim with a mighty blow of his beak and makes off with the booty. The chameck is a weak and harmless creature that depends only upon its swiftness for its safety. His assailant, on the other hand, is a powerful marauder, with strong claws, a powerful beak, and very swift in flight. The chameck uses his tail also as an organ of feeling. If his favorite food is placed behind the animal, it finds it by feeling with its tail; he also draws eggs and young birds out of the hollows of trees with the same limb. It is not true, however, that these animals are in the habit of forming a living bridge by swinging from a tree on the banks of a river to another on the opposite side. The natives prize the flesh of the chameck above that of all other game, and use its skin for a variety of purposes.



Chameck surprised by an Eagle Hawk.





## The Yak.

THE most remarkable among the widely scattered ruminants is the yak (*Bos grunniens*), an animal notable, in the first place, because of its peculiarly dignified appearance, and in the second place because it lives among the waste plains of Central Asia, high up in the snow belt, where the vegetation is so sparse that it is a wonder how so large an animal can find enough pasture to live upon. The yak is a powerful animal over eight feet in length, standing nearly five feet from the ground at the hump, and weighing as much as a heavy horse. Its body is thick-set, with a large and broad head provided with horns about two feet long, beneath which the eyes peep forth gentle and almost bashful. Behind its thick, bull neck rise the withers like a hump. The body is small across the shoulders and bulky in the middle, and the tail ends in a tuft of hair that almost touches the ground. The most peculiar and characteristic feature of the beast is its thick coat of long black hair, mixed at times with white, which covers its entire body with the exception of the face and a small spot on its breast. The home of the yak is the wild and almost barren plains of Mongolia, China, Tartary, and Tibet, where the animal moves about in great or small herds at a level of about five thousand feet above the sea. It has a wonderfully keen scent, but its sight is very poor, and it rushes about in mad flight when it has discovered the approach of the hunter. The old bulls of the herd often remain behind in a compact

body to cover the retreat of the females and the young, and at such times the pursuer runs a great risk of being ground into a shapeless mass by the hoofs and horns of some wounded animal. If the hunter is lucky and has courage and a sure aim, he creeps upon the herd and despatches a single animal, trusting to chance and the direction of the wind to conceal his approach. The yak, which is so tenacious of life that it seldom falls dead at the first shot, has a peculiar habit of standing stock still for a few seconds after the shot has been fired, and then beginning his onslaught, always staring fixedly at the hunter in the meanwhile. This pause furnishes the hunter with his opportunity, and yet he often finds it necessary to plunge seven or eight balls into the body of the animal before he can end its hardy life. The Mongolians hunt the yak with great zest, for its flesh is a delicacy with them, and they ascribe good luck to the possession of its head and blood. The native tribes also dispose of its horns at a good price to the passing caravans, while from the hairs on its rump and tail cords and strings of great resistance are manufactured. Tibet would be uninhabited were it not for the dung the animal furnishes in great quantities, which is the sole burning material of the hardy nomads who make that bleak and barren country their home.



Yaks.







Sea Eagle picking up an Ice Fox.



## The Sea Eagle.

THE sea eagle lives on all the coasts of Europe as well as in Siberia, Asia Minor, and in Egypt. He is a powerful, bold, and dangerous bird of prey, about three feet in length, measuring over eight feet from tip to tip of his wings, and with pale gray and yellowish brown plumage marked with alternate dark and light stripes and bands. Like the golden eagle he hunts all creatures that he can overcome, and is moreover a good fisherman, using his talons to the terror of all dwellers in the water. The armor of the hedgehog does not save that animal from the beak of the sea eagle, nor does the fox escape by means of its cunning or its sharp bite, nor the wild goose by its caution, nor the diving bird by its celerity in disappearing beneath the waves. The watchfulness of dogs and shepherds does not protect the lamb from the successful attacks of the sea eagle. All kinds of animals fall prey to the bold and persistent pirate. Even children, and, under certain circumstances, adults, have been seized by this rapacious bird. His chief article of diet, however, is fish, and his nest is, therefore, almost invariably near the sea-coast or in the immediate vicinity of some great inland body of water. He does not disdain even carrion, and in winter hovers above fish houses, butcher shops, and similar places, waiting for an opportunity to seize a waste morsel. In northern Russia and Siberia, when all the streams are ice-bound, the sea eagle is compelled to do his foraging entirely on land, and then sometimes pounces upon an ice fox out of a pack of these animals. He sweeps high up into the air with his prey, and kills it in spite of the violent resistance which this Northern cousin of Reynard may offer.

## The Dolphin and his Guests.

THE common dolphin, or the sea pig, figures very prominently in the tales that have come down to us from ancient times about the great sea mammals belonging to the whale family. This animal is found in large numbers in the Atlantic Ocean and the seas connecting with it, from Greenland to Africa, as well as in the Pacific Ocean as far as the islands of Japan. It is difficult to understand how the ancient Greeks acquired the impression that this extremely greedy and rapacious beast was a friend of man. But he is at all events an interesting dweller of the sea. The dolphin attains an extreme length of ten feet. His head is small, with a wide, rounded-off snout, and his eyes are in a line with the fissure of his mouth. His skin is soft, smooth, and glossy, dark brown, with a green or violet shading on the sides and pure white underneath. Voyagers often see him following the ship, disporting himself playfully by leaping out of the waves and then plunging down head foremost. The dolphin finds it necessary to spring out of the water in this manner because he is a mammal, and must rise to the surface to breathe. Since, for the same reason, he must keep his head above water when he is seeking his food, he selects shallow waters, such as bays, fjords, and mouths of rivers, for his hunting-grounds. His hunger sometimes drives him so far shoreward in pursuit of fish that he is caught on the beach and often perishes before the return of the tide. The





The Dolphin and his Guests.



artist who produced the original of our picture observed a very interesting spectacle. Some dolphins which were fishing and playing close to the shore were set upon by sea gulls. Whenever a dolphin appeared upon the surface with a captured fish, the gulls fearlessly swooped down upon him and shared his meal with him as self-invited guests. Since gulls are able to capture only small fish, it seemed to them that it would be a good idea for them to help themselves to a part of the dolphin's big catch. Such an occurrence is seen frequently by fishermen. The dolphins seem to have entered into an understanding of some sort with the sea gulls, as the birds do not seem to show the slightest fear of the great sea mammals.

## The Oryx and the Painted Hyena or Hunting Dog.

**A**MONG the stateliest and most remarkable species of the antelope of South and Central Africa is the oryx, which inhabits the most arid and desolate portions of the continent. It is about seven feet long, including a tail fully a foot and a half in length. It is four feet tall at the withers, and has straight, swordlike horns three feet long. The color of the oryx is a uniform dark brown on the upper part of the body, and white underneath. Its coat consists of thick, smooth, and stiff hairs. In summer its neck, throat, back, and flanks are yellowish white or reddish, according to variety. There are several varieties of the oryx, and among them are the beisa (*Oryx beisa*) which lives in Nubia, the saber-antelope, in Central Africa, and, in the northern portion of the same region, lives still another variety

of the same subdivision. One variety is found in the arid plains where vegetation is so scarce that a grasshopper can hardly get a living. These animals wander about, not in herds, but rather in families. The bucks often desert their relatives after pairing time, and go on their travels alone, having little to fear, since they can cope successfully even with the panther and leopard when they bring their sharp horns into use. In spite of their strength, however, they are very timid, and so quick to scent danger and run away from it that they are very hard to capture. There is something of stateliness and dignity in these animals, whether they be in repose or in motion. Ordinarily they move slowly, but under the stress of danger they display wonderful speed. In spite of difficulties, however, they are sometimes killed by native hunters, and their young are taken alive and sold to collectors for menageries and zoölogical gardens. Their chief enemy is the painted hyena (*Lycaon pictus*), a beast of prey which bears a close resemblance to the hyena. This animal, as our picture shows, hunts in packs, and so terrifies and confuses the oryx that it cannot defend itself long and is dragged down and torn to pieces by its hungry pursuers. But the end generally comes after some of its tormentors have been put to death by angry thrusts from the powerful horns of the desperate animal.





An Oryx Antelope pursued by Painted Hyenas, or Dogs of the Desert.







Ostrich on Nest.



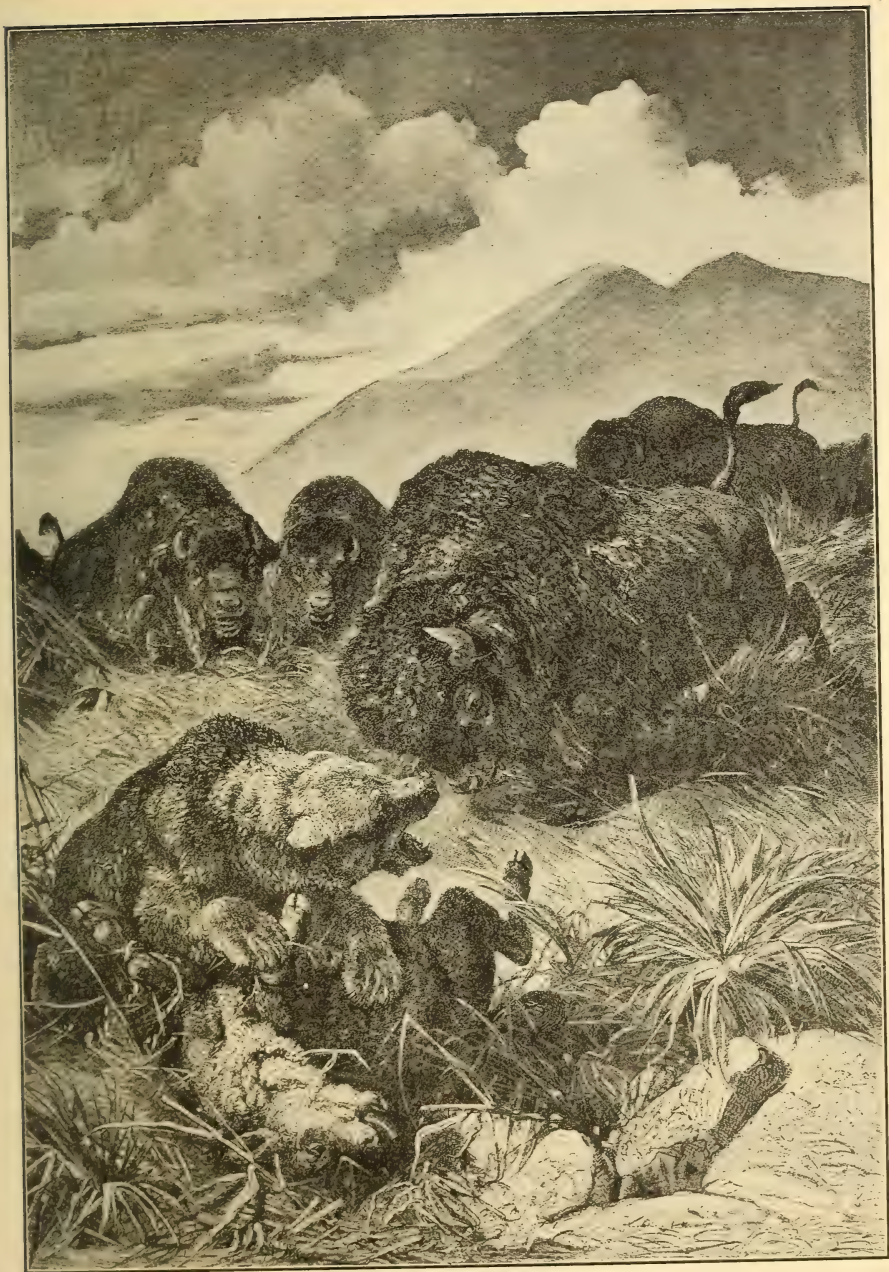
## The African Ostrich.

THE African ostrich is the largest bird of modern times, and lives in the lonely deserts of that continent. Although it is a harmless animal, its feathers make the ostrich so valuable an object for the zeal of the hunter, both civilized and barbarous, that it has been very nearly exterminated in some places or has withdrawn into the fastnesses of the desert. Eighty or ninety years ago large flocks of ostriches could be met with in the Cape lands of southern Africa. But now the bird has quite disappeared from that part of Africa, and is to be seen there only very seldom. The persistent stealing of the nourishing and palatable ostrich eggs by the natives and settlers is partly responsible for the progress of this work of extermination. Where ostriches are more plentiful, they live in families consisting of one cock and three or four hens. The latter lay their eggs in the same hole scooped out in the ground, and take turns in hatching them. Even the cock must do his share of this work, and when not otherwise engaged scans the horizon carefully for signs of approaching danger. Cock and hen vie in defending their eggs and their young against the marauders of the desert. By a curious habit, the young birds, as soon as they have reached a sufficient age, attach themselves to wandering herds of antelopes and zebras, and these animals prize them highly for their sharp eyes and their watchfulness. Our illustration presents a truthful picture of the family life of the ostrich. The young birds can be domesticated easily. This circumstance, together with the high price of ostrich feathers, has suggested to enterprising Englishmen and Americans the plan of raising ostriches in great flocks and plucking their feathers twice a year. This experiment has proved entirely successful, and many ostrich farms are in operation in South Africa and California.



## Grizzly Bear attacked by a Buffalo.

THE wild battle-scene portrayed in the accompanying picture is taken from life in the broad prairies of northwestern America. Hungry "Ephraim"—for thus have the hunters named the grizzly bear, a dangerous cousin of the common brown bear—has fallen upon a young bison which has wandered away from the herd. The hungry monster is about to tear his prey, into whose body he has already dug his powerful fore claws. The agonized bellowing of the doomed animal has reached the herd which has been grazing at some distance away, and the old buffaloes are rushing upon the scene with overwhelming speed, in spite of their apparent awkwardness. At once the grizzly bear is attacked by the angry leaders. "Ephraim" instantly realizes that he must give up his prey and defend himself with all his might. He is especially afraid of the foremost bull, who, with his colossal head lowered, his mouth covered with foam, and his tail raised in air, presents an impressive picture of unbridled strength and savagery. The battle cannot be greatly prolonged. According to trustworthy accounts a grizzly can overcome a single bison, but against a whole herd of these powerful creatures he is of little avail. Accordingly "Ephraim," who can run very fast, now either makes off at his best pace, or, remaining, is gored to death by the sea of horns that heaves about him.



Grizzly Bear attacked by Buffaloes.



## A Diver defending himself against Sharks.

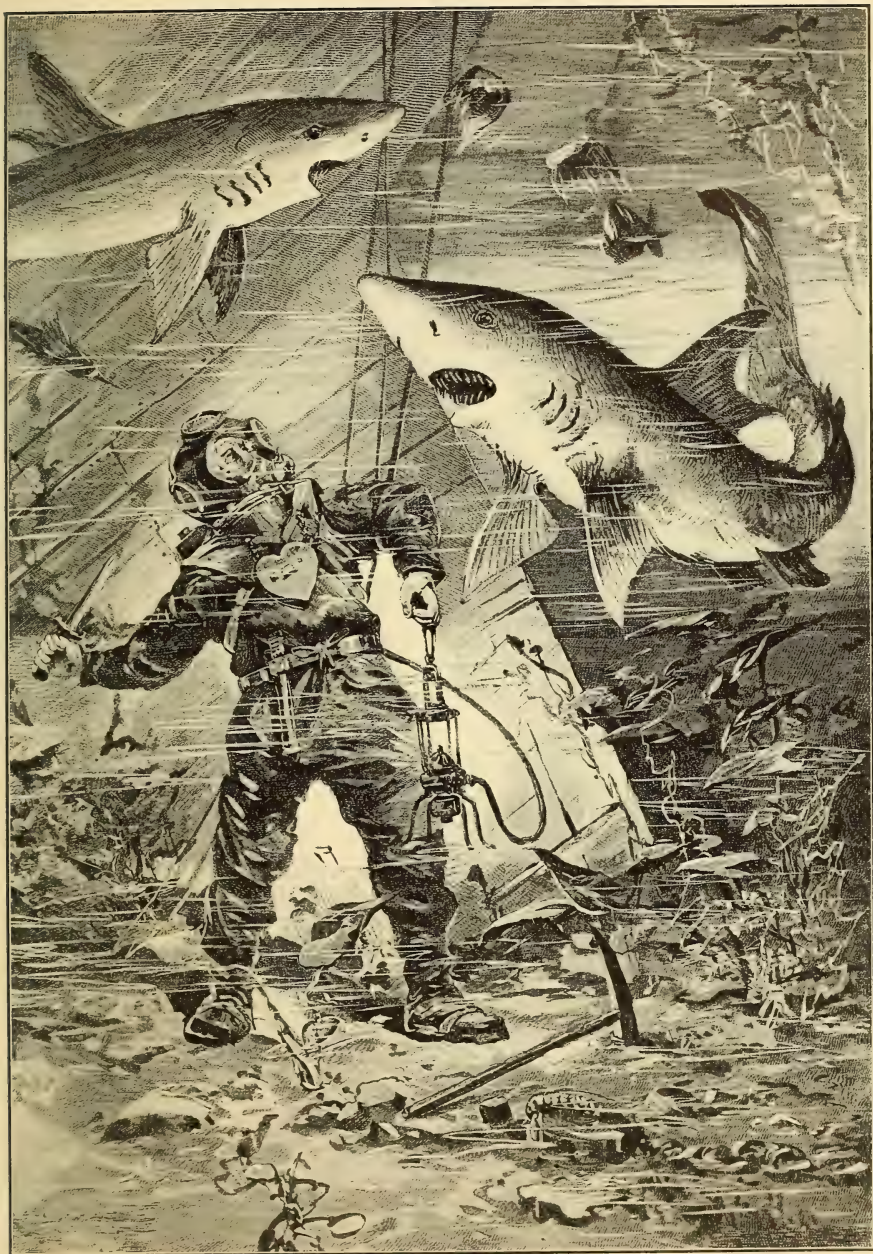
MANKIND has ventured not only into the bowels of the earth, but has dared also to plunge to the bottom of the sea, and to encounter the manifold perils of the deep. The sponge fisher dives almost always without a diving suit, and can remain under water for nearly five minutes at a time. But Aristotle described an apparatus which, in his day, enabled its wearer to remain under water much longer than that. A modern diving outfit consists most frequently of a thick helmet fastened to the head. From this head-dress tubes proceed to the surface of the water, and through these "supply pipes" the air is pumped from the ship to the diver. When a ship has sprung a leak, or has sunk, it is often necessary, in order to estimate the value of the wreck and the possibility of raising it, to send a diver down to the bottom of the sea, equipped with an electric lamp. On the north Atlantic coast the diver has no enemy to fear, but in tropic seas he is exposed to many perils. Chief among these is the swordfish, which can inflict fatal wounds with the sword which protrudes from its head. It is said that divers have been cut in two by this strange weapon. Only less dangerous than the swordfish is "the hyena of the sea," the man-eating shark.

Sometimes, when the diver is busily at work, he suddenly sees a great shadow stretching over the bottom of the sea, and glancing up, beholds to his horror the spindle-shaped body of

the man-eating shark. The head of this monster is flat, the snout is well thrust forward, and the broad mouth, starting from behind, is armed with sharp, triangular teeth. The scaly pirate has noted the diver, and draws near him. If the diver should lose his presence of mind, he would fall an easy prey to the greedy shark. But if he has his wits about him, he draws the dagger which he carries with him for such emergencies.

With great agility the imperilled toiler avoids the rush of the beast, and at the opportune moment plunges his knife from underneath deep into the belly of the shark. A mighty stream of blood stains the water; the powerful creature lashes the sea with his great fins, and, struggling in the throes of death, seeks safety in flight. But sometimes, as is shown in our picture, a second shark appears at this juncture, and the diver must battle for his life once more. Sometimes he is fortunate enough to come out a victor from the second conflict, but often enough he is terribly mangled by the hungry hunter of the sea.





A Diver attacked by Man-eating Shark.







Wood Owl capturing a Rat.



## The Wood Owl.

THERE are many animals which man, out of prejudice or blind obedience to false tradition, has constantly aimed to exterminate, although they are useful to him in many ways. The wood owl, or cat owl, is among these victims of human ignorance, as is the tree owl, one of the most beautiful birds of the forest, which is a particular foe to destructive rodents. The shrinking nature of the owl and his unearthly nocturnal cry of "Hoot! Hoot!" have brought him into general disfavor. The intelligent woodsman and the professional sportsman take good care of the wood owl, an animal which they recognize as useful to mankind, but the indiscriminating pot-hunter and the ignorant loafer pitilessly shoot down the inoffensive bird wherever they find it. The solitary and obscure habits of life which are so characteristic of the owl family, prove in themselves a protection to the wood owl, for he seldom appears abroad in the daytime, but lies concealed in the hollow of a tree, or crouches within a thick bunch of foliage, a grave, thoughtful bird, who does not venture forth in search of food until night or early morning. He then roves about the outskirts of the wood, in search of mice, which he seizes with great craft. The wood owl sweeps about in airy, curving flights, with moderate swiftness, above the ground, and so noiselessly that the mice do not hear him. As soon as he has spied a mouse, he swoops down upon it, seizes it with his beak and sharp talons, and bears it away. Sometimes he even despoils a nest of its young, or pounces upon a hare, or plunders a trap of its catch. Such cases, however, are exceptional. As a rule the wood owl watches, with wonderful patience, for field and wood mice, shrews and moles, and does fearful execution among them, especially in the early part of the year, when he is teaching his two or three young ones how to seize their prey.



## Albatrosses and Sea Gulls.

ONE of the greatest birds of the sea is the powerful albatross, which is found in large numbers throughout an extended belt between the 30th and 40th parallels, south latitude. Occasional specimens, however, are found even at Cape Horn. The albatross measures from ten to fourteen feet from tip to tip of his outstretched wings, and is white, with the exception of his jet-black wings. His most effective implement is his hooked beak, which is very strong and very sharp. Unable to catch live fish, he devours everything that may be floating upon the surface of the sea, eats all the mollusks he can find, and does not disdain even carrion. Therefore, in common with the robber gulls of the sea-coast, he plays upon the sea the part which the vulture assumes on land — that of a scavenger.

Our picture presents an interesting scene in the Pacific. Upon one of the islands in the Straits of Magellan, or on the coast of Chile, lies a seal, that has died, probably in consequence of wounds inflicted upon it by roving seal-hunters. The sharp eye of an albatross, peering down in search of a morsel of food, has discovered the dead animal. With a shrill cry of delight, the bird has darted upon its find. In an incredibly short space of time other albatrosses, of which there had been no sign till then, have flocked to the spot. Attracted by the cries and tumult, various kinds of gulls descend in clouds from their nests on many a cliff and crag, so that in the merest moment of time the place is



Albatrosses and Gulls on the Body of a Seal.



covered with a swarm of the vultures of the sea, quarrelling over their food in noisy confusion. The gulls follow the albatross just as the crow follows the vulture, or the hyena the lion, in the hope of sharing in the feast. When a whale or a great antarctic seal, as in this case, has been stranded, the crowd of scavenger birds that surround the banquet is large and noisy.

### The Desert Lynx.

A BEAUTIFUL and crafty animal is the caracal, or desert lynx, which is common to portions of northern Africa and southwestern Asia. It is nearly twenty-six inches long, with a tail ten inches in length; its form is leaner and its legs longer than those of the northern lynx, which is commonly found in certain portions of North America. Its swiftness and audacity are also greater than those of its cousin. Its drab color, running into a shade of brown, identifies the desert lynx at once as an inhabitant of the desert. Indeed, he is to be found in all the desert plains of Asia, India, and Africa, and feeds upon the other creatures of the arid expanses. Occasionally he waylays young antelopes, which he overcomes without great exertion. But it happens sometimes that he cannot enjoy his booty in peace; for the bold and tenacious jackal is at hand to get his share of the prey. This hungry beast is the most shameless and persistent thief of them all. Nothing is safe from his enterprise. He even follows other beasts of prey and literally snatches the booty out of their mouths. The fact that because of this habit of theirs many of the bold fellows lose their lives, and others suffer serious injuries, does not deter the rest from following in the same course. A highway robbery of this sort, which took place in a Nubian desert, is



presented in our picture. As a rule the jackals fare badly at the hands of the lynx; for while the latter is not the greater or the stronger of the two, he is at all events the bolder and more savage. Brehm says that a captive caracal fell upon a fierce dog that was placed in his cage, and overcame him in a short time in spite of the desperate resistance of the newcomer. No zoölogical garden or menagerie has ever succeeded in taming the desert lynx. Even the Arabs of the Soudan avoid him whenever they can. The animal in our picture has been aroused to a fury of rage by the persistence of the jackals, and so, with long, bushy ears laid low, with lips drawn back, showing a set of sharp, vicious teeth, and one sharp claw raised, he stands ready to bite or to strike as the occasion may demand. Some of the jackals have already felt the temper of his weapons, but they still stand about him howling and waiting until he shall have satisfied his hunger and shall leave the remainder of his meal to the persistent beggars.



Carakal, or Desert Lynx, defending his Booty against Jackals.



## Ocelot and Night Monkey.

CATS, in the narrow sense of the word, are all the smaller varieties of the numerous species that resembles Puss. A distant cousin of our house cat is the ocelot, which ranges from Texas to South America. In bodily measurements this animal is like the lynx, but is not quite so tall. Its thick coat of fur is beautifully marked, the main coloring being a brownish gray or a reddish gray, shading into a light yellow underneath. The female is not quite so prominently marked as the male. The ocelot lives in impenetrable forests, where he spends most of the day asleep, curled up like our own domestic pet; but he does not have any particular place to which he returns from his wanderings. Toward evening he becomes restless, deserts his lodging-place, and stays out all night. The ocelot commits heavy ravages among the game, and when satiated with flesh sucks the blood of his victim. He never misses an opportunity to do some hunting, whether he be hungry or not. During dark and stormy nights he creeps up to settlements and villages, looking for a chance to cultivate a close acquaintance with the occupants of the hen-roosts. He regards the monkeys as a special delicacy of his table, and our illustration shows an ocelot which has fallen upon a band of night monkeys in a forest of Brazil. These monkeys are among the most remarkable of their kind. They are peculiarly marked creatures, with three black stripes run-

ing down the skull, and a wide, bright yellow stripe descending from the neck to the root of the tail. The night monkey spends his days sleeping in the tree-tops or in the hollows of trunks. With the approach of evening he becomes wakeful. As daylight fades the pupils of his eyes enlarge, his eyes light up like those of a cat or an owl, and with the growing twilight he begins to search for food. The night monkeys climb wonderfully well and spring from tree to tree with the greatest facility in their chase of insects or their flight from danger. The ocelot, however, creeps upon them so slyly that generally the shriek of a captured animal is the first indication of the presence of the dreaded marauder.

### “Who Stops to Choose Waits to Lose.”

**I**T is lonely and still in the depths of the great forest. Seldom does a jarring sound break the silence. The wind stirs a dry twig, which suddenly rustles down upon the ground. A woodpecker hammers on the oak, or the hoarse scream of some bird of prey echoes far up in the blue sky. Then all is still again, and only the light breathing of the forest is to be heard. And yet there is no lack of life, and even of tragedy or of silent laughter, in the woodland. Reynard the Robber springs suddenly out of the thicket and breaks upon the morning trysting-place of two hares. One of the frightened little animals jumps to the right and the other to the left, while the fox triumphantly raises his bushy tail in the air like a victorious standard. Upon which of the two shall he fling himself? Master Reynard hesitates, pondering upon the great question. Who stops to choose waits to lose! The rule applies in a





Night Monkey surprised by an Ocelot.



hare-hunt as it does in other experiences of life. The heart of man often falls into perplexities and fails of its ends through the sheer force of its own fierce desire. The hares in our picture are apparently making the best of the brief opportunity for escape which has offered itself to them, and Reynard has lost because he has stopped to choose. The artist who produced the picture has succeeded in depicting in a lifelike fashion this strategic moment in nature. The hares are evidently masters of the situation, and their rapid flight will save them from the hungry mouth of the fox.

## Hamster and Polecat.

THE favorite haunts of the hamster, a busy little gnawer of the mouse family, are in the corn-fields of Europe and Asia. There the little fellows build underground dwellings of many chambers, in which they store the provisions which they collect in autumn. When the hamster is about to leave his home, he first carefully peers about on all sides to assure himself that there is no danger. After his head has become visible, a fat, yellowish brown body with short legs makes its appearance. The animal sits on its hind legs, and raises its fore body. Then it begins to clean itself, for cleanliness is one of its chief characteristics; after that it proceeds about its business of gathering corn and carrying it home in its cheek pouches. The hamster also eats worms, insects, lizards, snakes, or even a young bird or a mouse now and then. Let us observe him as he comes to the edge of the forest. Suddenly he stops, raises his head, and appears for a second to be deliberating whether it is wiser to run away or to stand his ground and meet the shock of the

enemy. Although he is a small animal, he is by no means a coward, for he has even been known to attack a man and to set a row of very sharp teeth into his leg. In the present instance he has evidently made up his mind that he will not retreat before the enemy, for he suddenly assumes a defensive attitude, snarling and foaming, prepared to defend himself with teeth or claws. Very soon the polecat makes his appearance and springs right and left in an attempt to take the hamster unawares, but the hamster keeps his weapons constantly in the face of the enemy. But weariness begins to show its effect on the little defender. The polecat springs at its throat and kills it despite the sharp claws. The successful hunter then carries his prey home and stores it in his larder. These decaying animals do not furnish a pleasant addition to the undesirable odor which the polecat himself gives out. The hamster is fatal to agriculture. The male and the female dwell apart, and each gathers a separate store between them, working a fearful depredation among the corn-fields. The farmer has really therefore to thank the polecat for its aid in the work of exterminating this pest. But the polecat, on his part, has some very disagreeable habits. In addition to his occasional raids upon the hen-coop and the dove-cote, he is not a pleasant neighbor because of his nauseating smell. Moreover, he is a malicious animal, and is very easily aroused to anger. He is very tenacious of life, and often surprises the hunter by resuming his activities after being taken for dead.





Polecat attacking a Hamster.





## The Spectral Tarsier hunting Drosera.

THE natives of Sumatra regard the tarsier or koboldmaki much as some other ignorant people of the Old World regard the toad and the lizard. A scientist has called the tarsier the toad among the mammals. The appearance of this strange fellow is something like that of the tree toad. Its hands and feet, and also certain movements of its body, are suggestive of the little green climber of our own acquaintance. The tarsier is, however, much larger than the toad, the full-grown animal attaining a length of from six to seven inches. The tarsier inhabits the impenetrable forests of the Asiatic islands, westward as far as Malacca. He is an insectivorous and vegetarian animal, and his odd appearance solely is responsible for the bad reputation in which he is held among the misinformed. The spectral tarsier has a head that is very nearly round, and his short snout protrudes beyond the face, somewhat like that of the frog or the toad. The broad opening of his mouth, extending along under the great owl-like eyes, adds to the toadlike appearance of his head. The fore legs of the tarsier are quite as remarkable for their shortness as his hind legs are for their length. His fingers and toes are bare and have great cushioned balls at the end. His tail is longer than the whole of the rest of his body, and, like it, is thickly covered with yellow, brownish gray, slightly red, soft hair, shading into a dirty white on the breast. In the daytime the tarsier remains in concealment in

dark, moist places in the forest, in the thick foliage or among the tangled roots of trees. At night he sallies forth for food. His way of sitting and jumping reminds one very much of the tree frog. The natives of Sumatra believe that the tarsier is an enchanted creature, that within him dwells the soul of an evil-doer, and that the sight of him is an extremely unlucky and untoward event. Scientists who have caught many of these harmless little animals with no other implement than their hands, have found them very amusing and easily trained. Our picture shows a pair of these animals, in the forest of East India, searching for one of the tubular insect-catching plants, mostly of the order of Nepenthaceæ (*Dionæa* or *Drosera* they are called), which are to be found there in great numbers. These curious plants have long tubes or hollows, four or six inches in length, in which honey-sucking insects by the hundreds become entangled and caught. The edge of the mouth, which is furnished with sharp teeth, rolls inward upon the honey-seekers, which are thus prevented from escaping and die in their prison. The ghost-animals are aware of the cruel habits of this plant, and take advantage of their knowledge by securing the well-stocked tubes and devouring them. In addition, the tarsier eats bananas and other fruits, of which the tropical forest yields an abundance.



Spectral Tarsier hunting Insectivorous Plants.





## The Aoudad.

OUR domestic sheep is manifestly a variety of the more powerful and the larger wild sheep, cultivated through thousands of years of breeding. The original stock is now very hard to determine, since, with the exception of Australia, each part of the earth has one or more characteristic varieties of wild sheep, all resembling the domestic sheep in their general features, but differing from it in others. Thus Europe has the moufflon, Asia the argali and caprovis polii, America the bighorn, and Africa the aoudad, a fat and robust animal standing three feet and over high at the shoulder, and near three feet and eight inches long, including a tail over ten inches. The male is somewhat more compactly built, and has larger and more powerful horns than the female. The head of the aoudad is handsomer and his glance more timid and sharper than that of our sheep. The color of the creature is a pale reddish brown, shading into a chestnut, dark brown, or yellow in parts. The fleece of the aoudad, unlike that of the sheep, is perfectly smooth. It consists of thick, coarse hair, beneath which a layer of fine wool lines the body compactly. He has a mane which grows long from underneath the upper part of the neck, and falls over the fore legs in a thick fold which almost sweeps the ground. This constitutes one of the distinguishing marks of the animal. The aoudad is a mountaineer and its home is in upper Egypt and Abyssinia, but especially among the Atlas

Mountains and other North African ranges. The species is very rare, and its great timidity makes it very difficult to capture. It lives upon mountain plants, undergrowth, and dry grass, which grows but sparingly in the inaccessible and rugged cliffs amidst which the animal wanders in search of pasture. The aoudads live alone or in isolated pairs as a rule, but little herds come together during the pairing season in November. At these times, owing to the excess of males, bitter and long-continued fights are fought for the choice of a mate. Very often, after a fierce battle, the victor forces his less fortunate antagonist over the nearest precipice, and calmly proceeds to take possession of the spoils of war. The Algerian Bedouins hunt the aoudad with great zest on account of its flesh and hide. The animal first became known to Europeans in the second half of the sixteenth century.

### The Sparrow Owl catches a Squirrel.

**T**HE day owls, apart from their mode of living, as indicated in their name, differ outwardly from the night owls in that their head and body are smaller than those of the latter. The sparrow owl, with his rich display of gray, white-banded plumage, with long and rather tapering feathers, is a beautiful and noticeable bird. It is seventeen inches long and measures nearly two feet eight inches from tip to tip of its outstretched wings. The northern countries of the Old World are his home, and he prefers to flock in the birch forests of Scandinavia, northern Russia, and Siberia. The heavy snowfalls sometimes compel the sparrow owls to migrate to more southern latitudes. Occasionally they are to be seen in the north of Germany and in eastern and western Prussia. They hunt by day, mostly for



Hunting the Aoudad in the Auras Mountains.







Sparrow Owl capturing a Squirrel.



lemmings, but even squirrels and birds of considerable size have been known to succumb to their attacks. Our picture shows a sparrow owl who has just made a good catch. The illustration reproduces an actual occurrence, and is lifelike in its presentation of the flight of the owl, which has driven its talons into the back of a pretty squirrel.

## The Hyena and the Zebra.

ONE of the most characteristic species of the dog family, which is scattered all over the earth, is the hyena of South Africa. It is about as large as a small wolf, with a slender, smooth body, and is very swift, cunning, and rapacious. The general colors of the skin are white, black, and ochre-yellow ; but as with our domestic dogs, so with his wild relatives, there are no two exactly alike. The hyena, which is found in great numbers in Cape Colony, in East and West Africa, and in Abyssinia, hunts in packs of about sixty, and pursues wild animals with such speed and endurance that it overtakes the swiftest antelope. Not content with its execution among wild animals, the hyena works great devastation among the cattle of the South African farms. The hyenas have such a lust for destruction that so long as there is any living animal in sight, they do not think of eating their prey, but continue the killing tirelessly. In spite of its disagreeable habits, the hyena is a most interesting animal to observe, and a pack of them on the chase is a fine spectacle. Their common prey is the sturdy zebra, which is to be found in all the mountainous regions of South and East Africa. The strong, watchful, and speedy zebra scents his bloodthirsty enemy from afar, and flees over the grassy plain with all speed. After him storms the pack of



hyenas, snarling, howling, and whining in an indescribable pandemonium of sound. When the foremost of the pursuers becomes exhausted with the race, he surrenders the lead to the animals immediately behind, which have been better able to save their strength. First one and then another of the blood-thirsty pack falls yelping to the ground, crushed by a blow from two powerful hoofs; but eventually one of the older and more experienced hyenas succeeds in fastening itself, as shown in the picture, upon the neck of the fleeing animal, and the next moment the zebra is struggling upon the ground. Howling with joy at their victory, the hyenas fall upon their prey, tear it to pieces, and crowd about the carcass, yelping, snapping, and growling, an ugly, loathsome mass.



Hyena Dogs tearing up a Zebra.



## The Opossum and the Earth Squirrel, or Chipmunk.

THE opossum (which wears the scientific name of *Didelphys virginiana*) is a native of the American forests, and is vigorously hunted. To the uninitiated its ugly, ratlike form, with its coarse, light gray pelt and long, hairless tail, is altogether repulsive. The animal has also a smell that suggests garlic very strongly, and is a decidedly unwelcome visitor to the hen-roosts. The opossum lives in isolation and makes its appearance at night, when it proceeds to seize all the birds and birds' eggs that it can get. In winter it is seen just after sundown, tripping over the snow with its sharp nose close to the ground, carefully following the tracks of a hare, and from time to time rising on its hind legs and scanning the moonlit landscape. At a point where the hare has made a long jump the opossum halts in confusion, having apparently lost the scent. But some equally desirable prey is evidently near at hand, for Master 'Possum makes a stop at the base of a big tree close at hand. For some minutes he examines the ground very closely, circling about the thick trunk, and sniffing the surface of the snow. Suddenly he discovers a cavity between the roots, plunges into it quickly, and presently reappears with a strangled chipmunk in his mouth.

The victim belongs to the squirrel family, but its feet and legs are shorter than those of the common squirrel, and the scantily haired tail is a trifle shorter than the body. Running down its back



are long light stripes. The American chipmunk hides among the roots of the trees, underground, where it lies dormant during the winter, but the sleep of the animal which Master 'Possum has just captured has not been sound enough to prevent the little beast from defending itself with its sharp teeth, and the opossum bears traces of the struggle in the form of a bleeding wound behind one of its ears. After it has captured its dinner, the opossum eagerly scrambles to one of the boughs of the tree. Curling its tail about a branch for security, and holding its prey fast with its fore legs, the animal proceeds with its meal in peace and comfort.

At other times it manages to make its way into the poultry-yard, kills a fowl and carries it off, or else sucks out the contents of one newly laid egg after another, quite undismayed by the outcry of the hens. When the opossum finds escape impossible, it curls up with every appearance of being absolutely dead, and the greatest torture cannot compel it to throw off its disguise. Under these circumstances it is often left for dead, but when the danger is past, it resumes its normal appearance of health, and trots off as fast as it can. The opossum is a marsupial, or pouched animal. At birth its young are very small and helpless, and they remain in the mother's pouch until they are able to get about and provide for themselves. The love of the mother opossum for her young is very strong, and no amount of suffering is great enough to compel her to open the pouch and disclose the little treasures that lie concealed there. The flesh of the opossum is sometimes too strong for the palate of the white man, but the negroes relish it as a rare delicacy.



Opossum catching a Squirrel.



## Fighting Sea-lions.

**N**OBODY has been able to discover exactly how the plump and awkward coast-dwellers which are known as sea-lions acquired their high-sounding name. One can hardly conceive a greater contrast than is to be found between these mammals and the graceful stags ; yet the two have some disagreeable characteristics in common. Both fight bitterly, and often to the death, for the possession of the same privileges ; and the sea-lion, like the stag, has to win his bride only by passing over the prostrate body of his foe. The vanquished is left to bleed his life away while the animal which is victorious by virtue of his greater strength succeeds to all the rights of the stronger. How clumsy the sea-lions appear in their fierce battle, as they go lumbering about in their fight for supremacy, with their lives as the stake of victory or defeat ! This lowly family of mammals lives upon the ragged cliffs of the northern Pacific coast, and on the shores of Bering Strait, in the neighborhood of the nests of gulls and other sea fowl. The fighters in the battle shown in our picture are over sixteen feet long and weigh about one thousand pounds each. The female, for the favor of which they are struggling, is hardly more than half that size. The greenish gold shimmering, short-haired coat of the sea-lion is considered a rare prize, and the animal that wears it is hunted eagerly. His pelt is used for upholstery and the manufacture of soft shoes, while a superior variety of cord is made from the



entrails, and his fat is useful for many purposes. The natives esteem his flesh as a delicacy. Some idea of the rapid increase of this animal may be obtained from the knowledge that about eight hundred of them are captured annually upon the island of St. Paul alone.

### Mother Bear bathing her Cubs.

**T**HE she-bear gives birth, ordinarily in the second half of January, to one or two cubs, which remain blind for the first month of their life. When they are about three months old they are taken with their elders upon their travels in search of food, and during this probationary period the funny little fellows are subjected to a most rigid course of training. For naughtiness or carelessness they are punished with a box on the ear, and are taught how to climb trees — an exercise at which Master Bruin at first is often very funny. He is even funnier when he is descending from a tree backward. In fright he digs all his toes into the bark and has to be helped down by his elders. As our picture suggests, bears are very careful to keep their offspring in a state of thorough cleanliness. The artist has selected for his sketch the moment when a mother bear has plunged her frightened and howling offspring into a mountain brook and holds it there, while the second cub looks on, evidently pleased at having already undergone his share of the ordeal. Bear cubs at the age of five or six months are the most amusing creatures imaginable. They are playful, and gambol about like merry children, dealing each other playful blows. But, unhappily, in the second half-year of their lives they acquire the crabbed temper of their parents, and are much to be feared on account of their strength and their bad disposition.



Sea-lions in Battle.







Brown Bear washing its Young.





## Tiger with Booty.

**F**IERCEST and most dreaded of all the cat tribe, the tiger combines beauty with cruelty, strength with rapacity, and boldness with craft. If audacity and fierceness comprise royalty, then the tiger rather than the lion should be the king of beasts; he terrorizes all the other animals, and is shunned and feared by all; he is a hunter, a prowler, swift of foot, sure of eye, and great at ambushing and stalking. If the tiger has any preferences in regard to food, it is for the deer or wild boar; but, when hungry, he will eat anything eatable from grasshoppers to crocodiles.

In the picture here presented we see the tiger carrying away the booty he has cornered and captured; in this case, it is a dish of his favorite food — antelope.

In this case he has taken his prey as is his custom — not by steadily crawling and one great bound — but by swift surprise and rapid leaps; with a furious blow of his paw he has maimed the muscles of the antelope's hind legs, thus making it impossible for it to run, and then, lifting his game bodily in his powerful jaws, he bears it off to eat it in security and at leisure. The eating capacity of a tiger is sixty pounds, so if his game exceeds that weight, he takes what he desires, drinking frequently and then going to sleep; later, when quite ready, he returns to his meal, if, meantime, the robbers and beggars of the forest have not stolen the banquet from the king's table.

The tiger is not really brave so much as he is bold. He hunts like a cat, and like a cat turns tail unless surprised or cornered. From a brave man he always runs if not brought to bay; but as man is his most easily conquered prey when really taken at disadvantage, so the tiger adds to his cunning a bold and impudent audacity that seems almost bravery. There are cases in which a tiger has even leaped to the back of an elephant to attack the rider or hunter; and there are also tigers which have terrorized whole districts by their fierceness and have carried off scores of human victims.

On the other hand, however, the tiger rarely troubles men unless driven to bay, and it is even held that in India, at least, this striped monarch of the jungle has done more good than harm — killing the worn-out old cows, who if they lived would have bred the cattle plague, destroying the boar and deer which are the pests of farmers and harvesters, and guarding the farm from invasion so zealously that sometimes the natives have been known to grumble when one was killed, and say, as they stood above the great dead cat, "He never did us any harm; what a pity he is dead."

### Giraffes at a Lagoon.

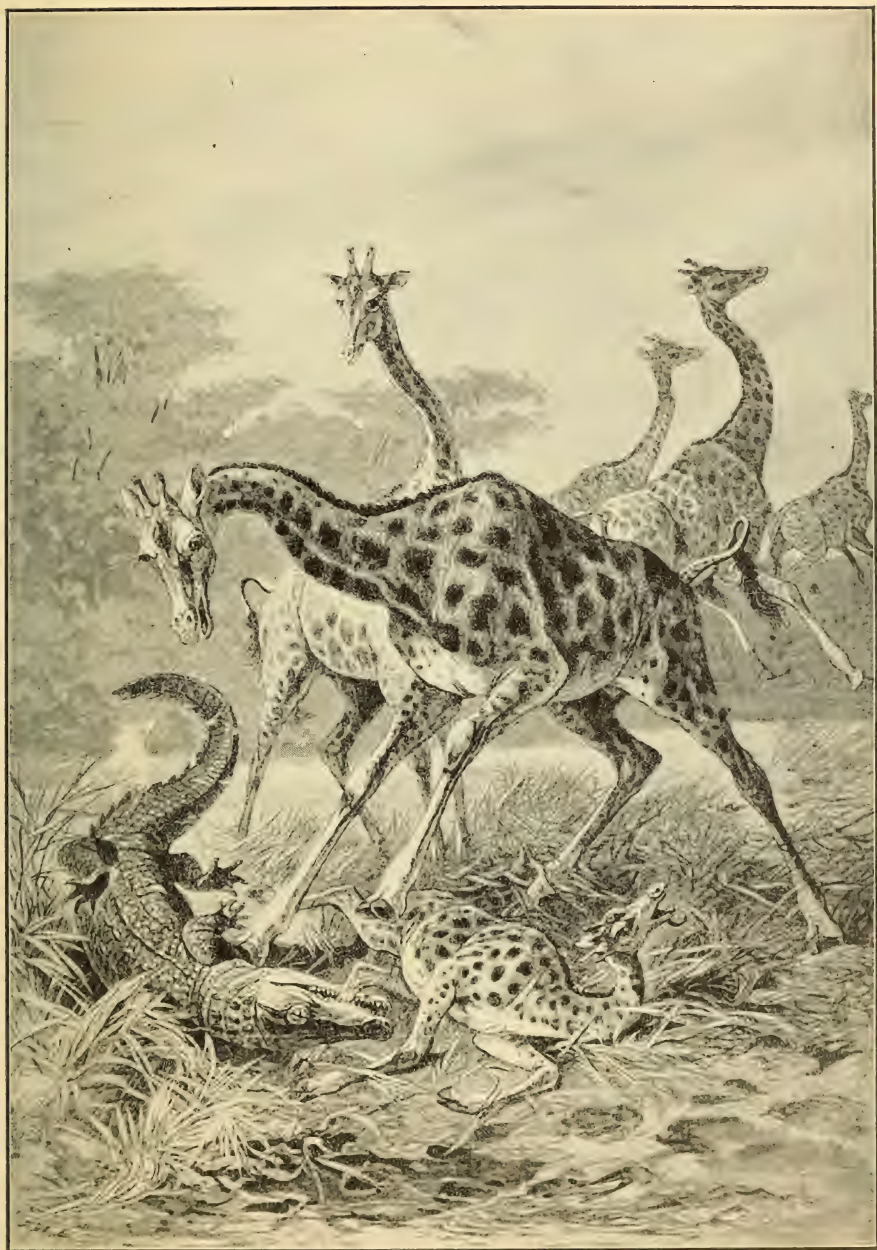
WHILE on his royal rambles through his realm the king of the desert often turns to the swamps and pools, where he crouches in the tall grass awaiting the approach of the thirsty giraffe. Indeed, the lion has been taught by experience that the spot which he has chosen for his hunting vigils is admirably suited for his purpose, for the giraffe cannot abstain from water for any considerable length of time, and is bound to make his way sooner or later, and generally with great



Tiger with Booty.







Giraffes in the Lagoon.



frequency, to the nearest lake or stream, or, lacking such larger supply, to the most available pool. In every other respect the giraffe is almost as hardy as the camel. The animal makes a very grotesque appearance, with the apparent disproportion between its long fore legs and the short hind ones, and its long-stretched neck with a small head perched at the end of it. But its peculiar shape is very well adapted to its surroundings and harmonizes entirely with its habits of life. No lover of beauty can fail to be impressed when he sees this singular creature beneath the picturesque drooping palm of Central Africa; for the full-grown male giraffe reaches a height of eighteen to twenty feet, its color is a pale yellow with beautiful brown spots, and it is able to thrust its head among the topmost branches. Indeed, Baker, the learned traveller, pronounces the giraffe one of the most beautiful animals. It is very intelligent, and its faculties of sight and hearing are highly developed. As a rule it is good-tempered and peaceful, and only when it finds itself or its young threatened by an approaching foe does it resort to violence; at such times it defends itself fiercely. Strangely enough, it does not employ its short and stumpy horns for purposes of self-defence. They are apparently only ornamental in their design. It uses its long, thick, and bony fore legs, however, to very good effect as weapons of defence, and often succeeds in inflicting so heavy a blow with them that even the crocodile, which has approached its young with an evil purpose, is driven away, as in our picture, and sometimes it has even put the lordly lion to flight. The king of the desert therefore finds it safer to lie in wait amid the lush vegetation on the shore of a lagoon, and from that covert to spring upon his victim from behind and grasp it by the neck. Both natives and settlers hunt the giraffe with great zest. In captivity the animal sickens and soon dies from the lack of exercise and proper food.



## The Fossa.

A WONDERFUL and quite unique animal world is that of the island of Madagascar. Despite the proximity of the island to the African continent, its fauna is not at all related to that of Central Africa. Particularly characteristic are its apes and some of its remarkable rodents, but other of its animal classes present highly interesting forms. Among its noteworthy beasts of prey is the fossa, a picture of which may be seen on our drawing. This animal (a sort of weasel-cat or cat-weasel) lives in southern Madagascar, especially in the interior. At a superficial glance it looks very much like a pure cat, and yet it has a somewhat more extended skull. It has a long body, crouching legs, and a prolonged purr, just like those of a cat. The entire structure of its body suggests suppleness and agility. It has a stubby snout, wide ears, and medium-sized eyes, and its slender body ends in a long, catlike tail. Its short legs are very powerful, and each of the five toes at the end of its feet is armed with a sharp claw that can be withdrawn and concealed completely at the pleasure of the animal. Its short, fine, and somewhat frizzled hair is brown, varied with stripes of a straw color. In length of body the animal averages nearly three feet, not including a tail of over two feet long. The fossa is noted for its great ferocity. Telfair, who first saw it in captivity, says that however graceful and sleek the animal may appear, it is, in proportion to its size, the most savage among the beasts of



Fossas capturing a Fowl.



prey. At present little is known of its life in a natural state. It lives chiefly upon small mammals and little birds, and makes frequent raids upon the poultry-yards of the inhabitants. When the fossa is caught in the act of robbery by the aggrieved farmer, and finds all avenues of escape closed, he is likely to turn and defend himself with his sharp-pointed teeth and to inflict grievous wounds upon his assailant, who is sometimes compelled to beat a hasty retreat.

### Ant-bears in a Quarrel.

THE ant-bear, which the Paraguayans call "Yurumi," and the Brazilians "Tamandu," belongs to the Endentata order of animals (toothless), and his external appearance is most peculiar. His long, narrow head ends in a blunt snout. His tongue, composed of two muscles and two glandular bodies, is about one-third of an inch in thickness, and the yurumi can protrude it almost twenty inches from his mouth. With his sharp-clawed fore paws the ant-bear scratches into the ant-hills, thrusts his long, swaying, and sticky tongue among the struggling little people, and draws it back into his mouth heavily laden with insects.

The long, hairy tail of the ant-bear is like a waving standard. It is in harmony with his pleasing color, a blended shading of gray, brown, and light yellow, and contributes something in the way of beauty to the animal, which is otherwise positively ugly.

The yurumi is to be found in all parts of South America; but the uninhabited sections of Paraguay are his special haunts. Here he goes hunting for ants and termites by day as well as by night. He is a peace-loving, rather unsociable creature, and



when frightened or molested seeks flight at a lumbering trot, covering the ground so slowly that a man can overtake him at a brisk walk. When hard pressed or driven into a corner he turns in self-defence, and his sharp-clawed fore legs are weapons dangerous to man or beast. Ordinarily, however, he takes pains to avoid controversy. For the most part, the ant-bear is alone on his wanderings. At the most the hunter meets the mother and her young together.

That even among the animals that are otherwise so peaceful the mating time puts an end to indifference, is indicated in our illustration, in which apparently two amorous males have come to blows, and both are fighting out their battle with fierce embraces and heavy blows of their claws.

### A Prairie Scene in Winter.

THE northern blast is roaring over the snow-covered prairie, catching the snowdrifts and whirling them hither and thither, until land and air appear as if they were mingled together in a confused mass. The blizzard is beating pitilessly upon a herd of Indian ponies, a remnant, perhaps, of those wild thousands that roamed the prairies before the species was practically exterminated by the settler and the Indian. At some distance from the little troop, and apparently following it, is a straggler, evidently sick or otherwise disabled. Presently a long-drawn, blood-red streak appears in the west, upon the line where the leaden sky presses down to touch the sombre earth. For a brief time a dull, red glow lowers upon the surface of the snow, and then the lamp of day sinks to rest beyond the snow-laden clouds. In the meanwhile the troop of horses is cantering



Ant-eaters in Battle.





Coyotes attacking Wild Horses.





toward a little depression for shelter. Suddenly it halts. The animals stamp upon the ground so that a hollow echo resounds; then they turn about in a circle, tearing up the snow with their hoofs. The cause for their alarm is too evident. Out of the woods breaks a great pack of black wolves, surrounding the horses in a grandly closing semicircle. Hunger has driven the shaggy, lean fellows together to hunt in a pack. Gradually the half-circle of angry forms draws closer upon the little troop, the members of which, with heads together and hind quarters toward the outer edge of the circle, brace themselves for the attack. Driven by the craving of hunger, some of the foremost wolves fling themselves at once upon the horses, but are struck by powerful hoofs and flung back headlong. The wolves continue the attack, only to be repulsed again and again, until the snow is stained with blood and with the saliva that drips from the throbbing mouths of the beasts. Presently the pack pauses, watching for a weak spot at which to break into the troop. In the meanwhile, right deftly must the wolves dodge to avoid the flying hoofs. Finally some wolf, bolder and more watchful than the rest, succeeds in breaking through the circle and pouncing upon a horse. In a twinkling a plunging, snapping mass of wolves has fastened itself upon the animal. The other horses disperse at once, only to form again in a compact mass, with the old white horse at their head, continuing their flight over the prairie and soon disappearing in the gathering darkness. But some of the wolves follow with fatal swiftness, their noses to the earth, like bloodhounds on the trail. Gradually the pursuers close up to their prey, to continue the attack and conclude their repast.

## Wart Hogs.

THE wart hog (known to science as *Phacochærus æthiopicus*) easily takes the prize for ugliness among all his numerous kin. Upon the ridge of a cylindrical and wide body, covered with scant hairs, is a long mane, like a comb of stiff bristles. Its legs are fairly long and thick, and its short tail ends in a tuft of bristles. Small, pointed ears and prominent wicked eyes are placed upon a monstrous head, which is almost a third as long as the rest of the body. The snout of the wart hog ends in a sensitive disk in which are placed the nostrils, while below the eyes protrude two great wartlike projections, almost as large as the ears of the animal, and just behind the snout are two smaller warts. Its pointed tusks are well adapted for cutting, and project about ten inches from the mouth. The home of this unlovely beast is in the jungles of southern and eastern Africa, and there are two varieties of it which cannot be always distinguished at first glance. They live in herds throughout the swampy countries, and the southern variety likes to burrow in earth holes. The northern wart hog digs passages under the earth which, oddly enough, he enters backward. Both varieties live chiefly upon roots which they dig up with their powerful tusches. While they are doing this, they kneel on their fore legs and push themselves forward with the hind quarter. It is to this habit that they owe the callous places on their fore legs. The natives are said to stand in great fear of them, as the hogs, tumbling out of their



Wart Hogs in Battle.





holes with lightning speed, will rush upon the hunter and rip him open when they discover that flight is impossible. Among themselves the wart hogs are peaceable enough, but at mating time the old boar never tolerates a rival. At these times there are desperate battles between the fully matured hogs and the leader of the herd. The combatants line up, with eyes glittering wickedly and mouths frothing in fury. They rush upon each other with loud and angry grunts, and each tries to inflict a dangerous wound upon his rival, while skilfully parrying attack, until one or the other is killed. The first wart hog was brought to Europe in 1765, for the private menagerie of the Prince of Orange, at The Hague. It seemed to be tame enough, but did not hesitate to rip open the stomach of the domestic sow that was put into its cage, and a day later fell upon its keeper and injured him so severely that the man died in a few hours. The northern variety of the wart hog is not so formidable, and is found in a domesticated state. It has most of the habits of the domestic hog, and lives on potatoes and bran.

## The Saiga, or Antelope of the Steppes.

OF all the numerous varieties of the antelope, there are only two kinds in Europe,—the chamois of the Alps and other lofty mountains, and the saiga, or antelope of the steppes, a sketch of which is here presented to the reader. These antelopes, which are about the size of a deer, inhabit the plains of northeastern Europe, from the German boundary of Poland to the Altai Mountains, and from the lands of the southern Danube and the Carpathians to Siberia. One of the characteristic features of this strongly built antelope is its wide, thick nose and the snout which protrudes over the jaw. Its ears are short, stumpy, and rounded. The horns of the buck curve over in somewhat the shape of a lyre. They stand far apart, are knotty at the base, and furrowed with rings all the way up. At the very tip they are thin, transparent, and of brilliant coloring. The doe, on the other hand, has no horns. The length of the full-grown buck is about four and a half feet, and its height at the withers is over two feet and eight inches. The ill-formed, clumsy head of this animal makes it the least graceful of all the antelopes. Although its form is somewhat ungainly, the animal can run with great speed through the broad, flat country which is its home. The saiga is to be found all through the summer in troops of from twenty to eighty head, only small portions of which are full-grown bucks. The mating time is in November, and by the first of May the female gives birth to



Hunting the Saiga Antelope.





one or two kids. After the mating these separate troops gather in great herds of several thousand head, to wander throughout the winter in search of food; but with the beginning of spring they again break up into small herds, each of which has its well-defined browsing ground.

The hide of the saiga makes good leather, but its flesh has a disagreeable flavor, savoring strongly of the salty and coarse vegetation which forms the food of the animal. Only hunger or custom can render it palatable. In spite of this drawback, however, the Russians, Tartars, Kirghiz, and Kalmucks hunt the saiga eagerly either by stalking it or by pursuing it on horseback with trained golden eagles or dogs. The Tartars and Kirghiz often ride towards a wandering herd even without dogs and, selecting a choice animal, break up the herd and seek to capture it — a scene which is shown in our illustration. The wolves are among the most dangerous enemies of the saiga and often exterminate whole herds of these animals. The kids when brought up by man become wonderfully tame, follow their masters about like dogs, and at evening go back to their stalls unattended.

## Ocelot capturing a Flamingo.

**I**F the ocelot could only forget or forego his love for poultry, he might be a respectable member of society. The ocelots can be tamed as domestic pets, and will play and purr and fondle their master or mistress just as the house cat does; but once let them spy hen or chickens, and their good behavior is blown to the winds; they will pounce upon their feathered prey and strangle it without mercy; just as, in their wild state, they are the remorseless enemy of the whole feathered kingdom from fowls to flamingoes. Our picture shows the ocelot indulging his wild tastes for birds. In this case it is the long-necked, long-legged flamingo of our southern waters. That wading bird of the *Natatores* order and the *Anatidæ* family, with its brilliant plumage and its nocturnal habits, is an easy prey to its night-wandering enemy, the ocelot; for it flies low over the water, alighting as soon as the stream or pool shallows, and wading along the sedgy shores, where the spotted and ring-tailed forest cat lies in wait to pounce upon, seize, and strangle it.

The ocelot is a sort of American tiger-cat, inhabiting the warm regions north and south of the equator. He is about four and one-half feet long, including the tail, and some twenty inches high, strong of body and large of head, with short ears, a long, tapering tail, and thick, soft, brightly colored, striped and spotted fur. He is afraid of man; but man's chicken-coops too often prove an irresistible attraction, and, once suc-



Ocelot capturing a Flamingo.





cessful in robbing roosts, the ocelot is liable to keep up his poultry raid until trapped by the farmer or run to death by his dogs. With the wild fowl of the forests and rivers he is generally more successful, as in the case of the flamingo in our picture.

## The Orang-outang.

THE monster swampy jungles of Sumatra and Borneo shelter numbers of one of the greatest manlike apes, known to Malays as the orang-outang, or "Man-of-the-Woods." To scientists it is known as the *simia satyrus* or the *pithecus satyrus*, and in many respects is one of the most highly organized animals. The natives refuse to eat the flesh of the orang-outang because they believe he is an imperfect man, and that he could speak if he would, but prefers to remain dumb from fear of being put to work. The orang-outang attains to a height of four feet four inches in some extreme cases. It is thus one of the largest of the ape tribe, and is the nearest approach to man — a resemblance which is plainly observable in the skull of the young orang-outang when compared with that of a child. The head of the adult animal is pyramidal in shape, with a protruding snout and a projecting under jaw. Its body is broad at the hips, the stomach projects, and the neck is short and wrinkled in front, because the animal possesses a great throat-pouch that it can distend at will. It has long arms, provided with long hands and fingers. The thumbs of the feet often lack the flat nails. Its eyes and ears are very much like those of the human being, and its mouth is large and has a terrible power of biting. Its nose is flat, and the partition wall projects beyond the nostrils. It has a sparse growth of hair upon its

back and sides, but the covering of its head is thicker and somewhat resembles a beard upon the chin. The hair is very long and rusty red or brown red on the sides of the body, shading darker on the back and breasts and somewhat lighter on the lower part of the face. On account of its long arms the orang-outang walks almost upright and supports itself upon its knuckles. It feeds chiefly upon fruit, which it occasionally seeks in the fields of the natives, where it leaves general destruction in its wake.

### Suricate and Great Shrew Mouse.

THE most prolific among the mammals are the rodents, and especially the mice, which in our climate bring forth young seven or eight times a year. Still greater is the increase of these little mammals at the equator, and particularly in Africa. That continent produces a great variety of these animals, which increase at an enormous rate. Upon the Island of Ascencion there is a species of rat, the ancestors of which must have been taken there on some European ship. It has multiplied at such a rate that it has crowded the human population out of certain parts of the island. Among the native African varieties is the great shrew mouse (the *Macroscelides typicus* of the naturalists). It is a comparatively little known, harmless, and extremely shy creature. The great shrew mouse belongs to an allied and widely scattered variety, with thick, soft skin, very long hind legs, and little five-toed feet. Its length of about ten inches includes a tail of about four inches and a protruding and sensitive nose about half an inch long; this nose sometimes gives it the name of the elephant shrew. It inhabits the bare, stony hills of the desert, and is purely a desert animal, elegant and swift in its movements, and so shy that it scampers into its



Orang-outangs watching a Tiger Snake.







Suricate attacking a Great Shrew Mouse.



hole at the slightest warning of danger. It has young ones at least nine times a year, and would multiply inconceivably if it were not exposed to violence from several birds and beasts of prey, among which the little-known suricate (scientifically known as *Suricata tetradactyla*) is one of the most active. The suricate, common to the whole of South Africa, is about twenty inches long, that is to say, about the size of a half-grown house cat, which animal, indeed, it resembles somewhat. The suricate has, however, a pointed head, and five-toed feet armed with sharp claws. It is, one might say, a cross between a marten and a cat. The suricate is primarily a dweller of the desert, active, swift, and ever on the watch for prey. It eats snakes, mice, rats, and other small animals. It has, however, a particularly sharp appetite for the great shrew mouse. It creeps and pounces upon this animal everywhere, and in this manner effectively limits the increase of the rodent.



## Bearded Vulture and Common Griffin in Combat.

ON the barren plains and high plateaus of Tibet, above the forest line, the traveller meets the *Ovis polii*, or Pamir sheep, the greatest of sheeplike animals. Without counting the tail this animal is six feet eight inches long, and measures nearly three and one-half feet high at the shoulders, weighing about four hundred and ninety pounds. The giant horns of the male meet at the base, and at that point measure about twenty inches in circumference. They are curiously marked with great, closely lined rings. The horns of the female are smaller and resemble those of the goat. About the neck of both male and female is a thick woolly mane. The color of the animal is brown, with dark stripes upon the back. The Pamir sheep live in small herds of about five to fifteen head, in exceptional cases as many as thirty, which are led by a ram. They are wonderful climbers and very sure-footed. The Kirghiz believe that these hardy animals break the concussion of a plunge from a high cliff by falling on their horns. As a rule the Pamir sheep are very shy and inoffensive, but at mating time the rams fight with fierce desperation. During these battles the mountains reëcho with the sound of one hard skull striking against another, with a sharp report like the crack of a pistol. The struggle often continues until one of the combatants has been flung over the edge of a precipitous cliff. A griffin sailing in the dizzy heights has observed the fall of the conquered sheep, and swoops down



Bearded Vulture and Common Griffon fighting for Body of Pamir Sheep



rapidly upon the quivering body. This bird has an odd appearance. Its slim head, with a proportionately weak beak, tapers into a gooselike neck which is partly covered with white, downlike feathers. The plumage is uniformly light brown, somewhat darker underneath than upon the back. Standing upright upon his short legs, the griffin measures about a yard in length. His first move after he has alighted upon the dying sheep is to plough into the belly of his prize and tear out the entrails. But while the griffin is engaged in this task, a bearded vulture swoops down upon the scene, quickly followed by his mate. The form of the newcomer is far nobler than that of the griffin. The great head of this bird ends in a long and heavy beak, surrounded by a fringe of bristles at the base. His plumage is rusty yellow and black. In size the vulture has a decided advantage over the griffin. The new arrival rushes at his opponent with outstretched wings and wide-open beak, but the original discoverer of the prize does not allow himself to be driven away by a mere show of force. He is courageous, quick, and fierce, and awaits the onslaught with ruffled plumage, head drawn back, and beak wide open for defence. Suddenly he stretches out his neck with the quickness of a flash, and aims a blow at the interloper. The latter, however, is on his guard, and the battle continues with varying fortunes. But in the end the superior strength of the vulture gives him the victory, and he immediately proceeds to share the booty with his mate, while the griffin, exhausted and bleeding, flies away to seek other prey. Thus, in all nature, must the strong yield ever to the stronger.



## The Peacock Argus.

**I**N 1780 there came for the first time from the East Indies to Europe the feathery covering of a gorgeous bird which, up to that time, had been known only by hearsay, and had been classified as a pheasant of wonderful beauty. From that time the wearer of these feathers was called the argus pheasant. The name, however, is misleading in every respect; for the beautiful bird, a native of the East Indies and Malacca, is a pure peacock in appearance, form, disposition, and mode of living. Hence the name peacock argus or argus peacock is far more applicable to it than its original designation of pheasant, unless one prefers to call it by its Sumatran name of kuau. The peacock argus (as shown in our picture) attains to an average length of three and a half feet, more than two-thirds of which is taken up by the middle tail feathers. The plumage of the cock is of noble coloring, and the creature is perhaps the most beautiful of all known birds. The short feathers on its crown are velvety black, and those on the back of the head yellow and streaked with black, while the back is striped and spotted with light yellow dots and bands upon a background of brown. The plumage on the middle of the back is marked with dark brown dots upon a yellowish background, and that upon the lower portions of the body is banded with reddish brown, black, and light yellow markings. The long tail feathers are black and marked with white spots surrounded by black borders. When the bird is



The Peacock Argus.



in repose, comparatively little can be seen of the striking beauty of its plumage ; but he appears in all his glory during the mating season, when, with wings outstretched and tail spread out, he struts about the forest clearings paying suit to his prospective mate. As if to compensate for some of the glory of her lord, the hen is much smaller than the cock, and has a far more modest appearance. The young receive their resplendent covering only after repeated moulting. Little is known about the propagation of this beautiful bird, because it invariably conceals its nest in the most impenetrable part of the virgin forest. According to the accounts given by the natives, the hen lays from seven to ten eggs, somewhat inferior to goose eggs in size. These are deposited in a rude nest made of dry branches and leaves hastily scratched together. In the heat of noon the traveller or hunter comes upon the peacock argus in the deepest mountain forests of Sumatra, in some clearing which has been made dry by the withering sun. Here the glorious bird spends the tropical day resting, playing, lying on the warm ground, or bathing in the sand. His voice is as mournful as that of the domestic peacock, and his native name ("kuau") is an exact imitation of its cry. In his native haunts the argus lives upon insects, snails, worms, and buds of various kinds. In captivity he quickly sickens and dies, so that he is seldom seen in aviaries. His flesh, which the Malays prize as a delicacy, tastes very much like that of the common pheasant. The natives catch him in snares, but he is so shy that the hunter is seldom able to approach him within gunshot ; and his coloring harmonizes so exactly with the tropical foliage of the surrounding vegetation that he has no difficulty in concealing himself even from the keen eye of the native.



## The Tapir.

THE harmless and timid tapir is to be found throughout South America, from La Plata to the isthmus of Darien, in the primeval forests and in the region of lakes and streams and swamp lands. He belongs to the snouted animals, and is nearly four feet long, full three feet seven inches in height, and weighs three hundred or four hundred pounds. If the forests of South America did not shelter the peccary, the tapir would be the nearest approach to our wild hog to be found there, for the animal looks and acts a great deal like the wild hog. The tapir, however, lives mostly on vegetables, while the hog does not disdain other food. The female tapir, to which the above measurements apply, is larger than her mate, and the gait of both is slow and ponderous. There are two kinds of tapirs, the earth or dark brown tapir (*Tapirus americanus*) and the hairy tapir (*Tapirus villosus*), the latter being distinguished from the former chiefly in possessing a longer, heavier, and less bristly covering of hair. Both kinds are night animals, and frequent the swampy forest, where, by dint of frequent passage over the same tracks, they make well-beaten paths which often guide the hunter to their lairs. The tapir, unlike our domestic hog, does not live in herds, but wanders alone like the rhinoceros. The female, of course, goes with her young, which she brings forth into the world one at a time. The animals are seldom seen except while they are drinking and bathing at night or in



Tapir and Young pursued by Jaguar.



the early morning. During the rest of the time they lie concealed in the heavy growth of the jungle or remain buried in the mire up to their snouts to protect themselves from the bites of insects. The usual fare of the tapir consists of various kinds of foliage, and especially tender leaves and roots of water plants, as well as the shoots of palms and cicadas; but they sometimes venture into the plantations and destroy sugar-cane and yam, mango and melon plants. When alarmed they emit a thin, shrill, whistling sound and rush in blind haste into the nearest thicket. If they are wounded or cornered, however, they face about and defend themselves with teeth and hoofs, and are especially fierce in defence of their young. Their bitterest enemy, after the human hunter, is the swift and cruel jaguar (*Leopardus unga*), which lies in wait and springs upon a passing tapir from an overhanging branch. The efforts of the jaguar often prove fruitless, however, for the tapir runs swiftly into the nearest thicket and brushes off his enemy, who finds the greatest difficulty in plunging his claws into the thick hide of his victim. The proximity of the water is a great protection to the tapir, as our picture shows. Screaming with fright, the mother tapir, accompanied by her young, plunges into the friendly element. Here the jaguar must give up the struggle, since he cannot dive and swim as the tapir can.



## The Octopus and the Lobster.

THE navigators of past centuries have left blood-curdling tales of the octopus, whose body was said to be as big as an island and whose tentacles were as thick as masts, able to pull down a war-ship into the depths of the sea. These descriptions are very much colored, but they are not by any means entirely fictitious. In very late times some specimens, thrown up by the tide on the strands along the western part of the Atlantic Ocean, were captured, and on measurement their bodies were found to be from fifteen to eighteen feet long, and the reach of their powerful tentacles was thirty feet. It goes without saying that such monsters could prove very dangerous to fishing smacks. These giants, however, are seldom met with, though smaller specimens are found in large numbers in the Mediterranean. Many of them are caught by boys on the Riviera. The common octopus belongs to the order of the *Cephalopoda*. It has a sack-like, rounded body with eight tentacles covered on the inside with suckers. The eyes are enormously large, dark, and phosphorescent, shedding an uncanny light when the animal is in anger. On one side of the head there is a tubelike organ which the animal uses as a means of propulsion, by admitting water into it and then violently ejecting it. Thus the creature advances through the water at a high rate of speed, hind part first. When alarmed the octopus discharges through its funnel an inklike fluid, the so-called sepia. This liquid surrounds the



The Octopus and the Lobster.



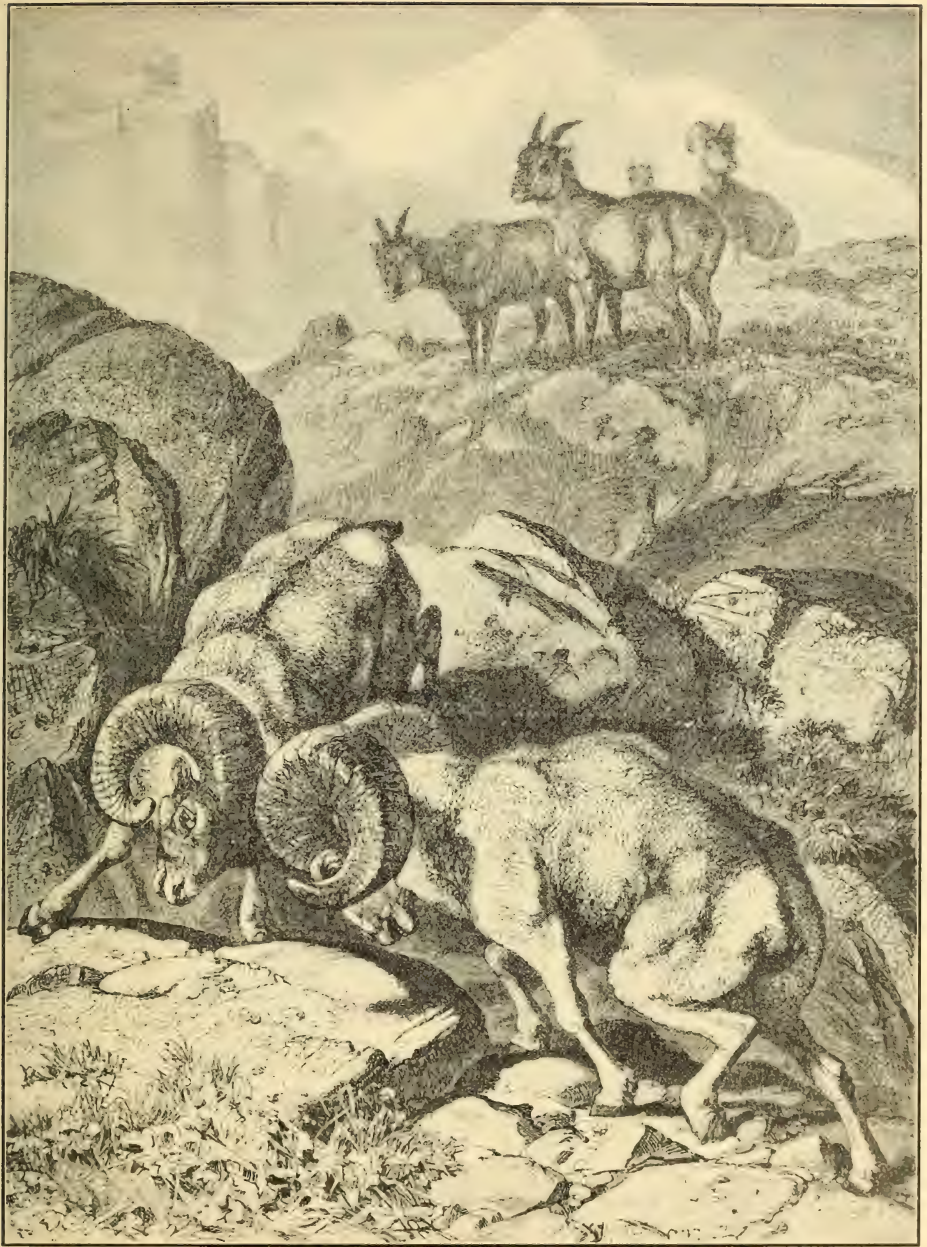
creature like a cloud, concealing it from its pursuers. The animal breathes through gills like an ordinary fish. The octopus is a voracious feeder, and devours large quantities of fish, crabs, snails, and mussels ; in fact, he seems to have a special appetite for every living creature which he can overpower. He watches for his prey in shallow waters, lying motionless between the rocks. At such times he has a whitish gray color, similar to that of his surroundings. As soon as his prey appears, the watcher throws himself with incredible swiftness upon it, throws his arms about it, and fastens his suckers deep into its body. During the heat of the battle his color changes visibly from brown and red to yellow, the long arms shoot hither and thither like snakes, loosening themselves at one place only to refasten with lightninglike speed at another, wartlike protuberances make their appearance upon his back, and his eyes glisten with such a wild and cruel light that the octopus becomes far more repulsive than he ordinarily is. How great is the courage of the octopus and the audacity of his attack and defence, as well as the power of his soft, boneless arms, was recently shown in a combat between a small octopus and a lobster, which took place in an Italian aquarium. A lobster from the Mediterranean, a giant of his kind, which was quartered in the large basin, one day cut off the head of a turtle with a snap of his claw. As a punishment for his crime he was placed in another basin in which a number of small octopi were kept. In the beginning the polypi circled rather cautiously and suspiciously about the intruder, always retreating before his great uplifted claws, until at last one of the octopi ventured upon a decided attack. Instantly the lobster was surrounded by the tentacles and body of the octopus. Everything seemed to be polypus, only a small part of the lobster being visible. Then one of the claws of the lobster closed upon an arm of the attacking animal and it looked



as if the limb would be amputated. Evidently the octopus feared as much, for he retired from the conflict, and both contestants withdrew into opposite corners of the basin. But peace did not last long. The attack was renewed from time to time, and the lobster had to be placed in a neighboring basin, which was separated from the first by a partition reaching half an inch above the level of the water. But even this did not mend matters. In the course of the first day the octopus scaled the wall, pounced upon the unwary lobster, and literally tore him in two after a short struggle. It is worthy of note that the aggressiveness of the octopus was not prompted by hunger, as there was plenty of food in the aquarium, and the attack was caused by sheer hatred and love of revenge. This incident is a ghastly indication of the character of this marvellous animal, and conveys a faint idea of the frightful combats which are constantly going on beneath the surface of the sea.

### The California Bighorn.

THERE is a wonderful and suggestive parallel in the distribution of wild animals over the different zones of the earth. Under similar conditions of altitude and climate, similar animals are to be found in the Old and the New World alike. Among the precipitous mountains of North America, the place of the Alpine ibex is taken by the mountain sheep or bighorn, a noble animal closely related to the ibex, the Asiatic argali, and the Pamir sheep. Its body is as large as that of a stag, and its head might be taken for a copy of that of a sheep or an ibex. The ram is about three feet high at the shoulders, and the female a little less than that. Both have a strongly knit and thick-set body. The ram, however, differs from his mate in that



Bighorn Sheep battling.



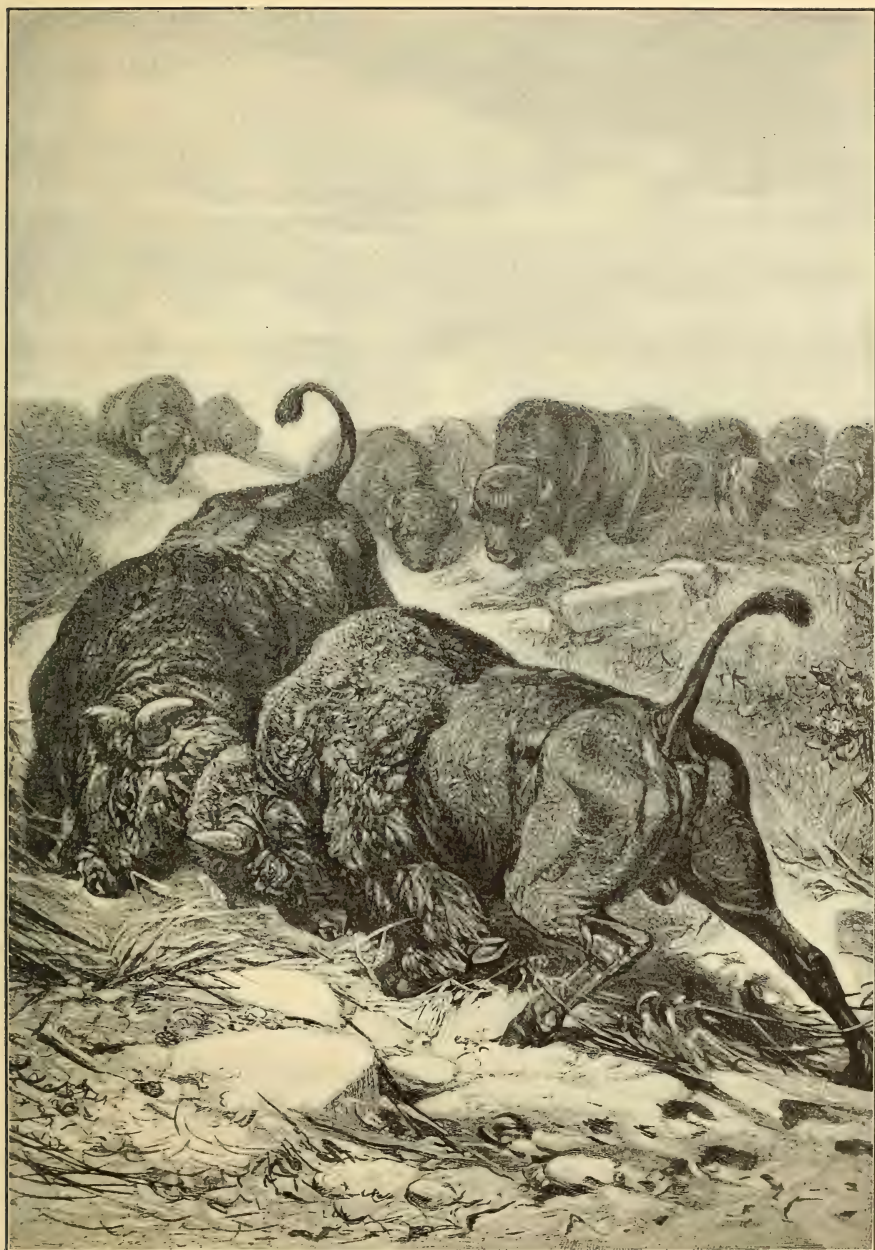
he has a set of peculiarly curving horns which weigh about fifty pounds, while the head of the female is adorned with modest horns not over four inches in length. The bighorn is to be found only on the western slopes of the mountains, between the fortieth and fifty-fifth degrees north latitude, and in the bleakest and most precipitous regions, especially in that large tract of territory which French-Canadian trappers called the "Terres Mauvaises" (Bad Lands). Here this hardy creature is met with in herds of varying size. Its general habits are like those of the ibex, an animal which it resembles in its wonderful swiftness and sureness in climbing almost perpendicular cliffs, and in its timidity and sharp sense of sight and smell. The females and the infirm males remain together all the year in herds of from ten to fifty head. The able-bodied rams go in pairs or singly, and return to the herd at mating time, when they fight with great spirit until the strongest has driven his weaker rival away from the females. Such a struggle is presented in our picture. Until recently no one had succeeded in capturing a bighorn or its young alive, for a few weeks after the birth of their kids the mothers take their young into the inaccessible cliffs and mountain caves, where even the most daring hunter would be rash to follow. Indians and whites vie with the wolf in pursuing the bighorn. The thick and yet soft hide of the animal makes a very fine quality of leather; and its flesh, while in the fat, from the middle of August until the end of November, is very savory, and furnishes the successful hunter with a delectable dish. A large-sized ram weighs as much as three hundred pounds, and almost every part of the animal, from the hoofs to the tips of the horns, is very valuable.



## A Vanishing Animal.

GENERAL RUSH G. HAWKINS, a noted American sportsman and soldier, considers the extermination of the bison as one of the most pathetic chapters in the entire history of human cruelty. The trapper Kit Carson, who traversed the prairie in the early period of the settlement of the West, relates that during a six days' journey he travelled constantly through a single herd of buffalo, and says that during his progress there was nothing but sky and buffalo to be seen as far as the eye could reach. In 1871 there were two great buffalo herds in the United States—south and north. The former, estimated at 3,000,000 head, had ceased to exist in two years. In 1880, at the time of the building of the Northern Pacific Railroad, the northern herd was estimated to contain 1,500,000 head. During the following year the Hudson Bay Company exterminated 230,000 of them in order to secure their tongues and hides.

When it was already too late to do much toward saving the remnant of this noble animal, Congress interested itself in the matter. As many bisons as could be found were taken to the Yellowstone Park, and another refuge for the buffaloes was established in 1891 at the Salt Lake in Utah. In 1894 there were 200 of these animals in Yellowstone Park. Two years later only fifty of these were left, because poachers, either with the aid or the connivance of the park officials, roamed about the great national reservation, and shot down the animals at their



Fighting Buffaloes (a Vanishing Animal).



own cruel pleasure. The number of buffaloes in Canada in 1889 was placed at 650 by an eminent Canadian authority. In commenting on this circumstance the same authority remarked: "The Indian is perishing with the buffalo."

One result of the extermination of the buffalo was that the Indians began to starve. They grew restless, revolted, and went on the war-path against the white settlers. The latter took terrific reprisals, and the general result was a war of extermination between the red man and the white, with all too pathetic results for the former.

The buffalo or bison is an animal of imposing appearance. Its head is thick and powerful, and somewhat larger in the bull than in the cow. The horns of both male and female are short and thick, curved outward and then upward, and pointed in again. The head, neck, and fore part of the body are covered with a shaggy mane, which lend a peculiarly ferocious aspect to the animal. In addition, the bull has a beard at its chin and throat. The nose of the animal is wide and well adapted to the purpose of shovelling away the snow under which, in the winter time, the buffalo must seek his pasture. The eye of the buffalo is large and wide open, and does not display that meek look which we are accustomed to see in our domestic cattle, but speaks of boldness and defiance. Owing to the mighty growth of grayish brown fur that covers it, the buffalo looks somewhat larger than it really is. But the animal cannot by any means be considered small, because a full-grown bull weighs 2000 pounds and more. The buffalo is an exceedingly active animal, runs with great speed, and can travel with safety over territory that would be almost impassable to a horse. The flesh of the full-grown bull has, particularly in the spring, a strong flavor, and is always tougher than that of the cow. Next to the haunch, the tongue is the most appetizing portion of the buffalo. The



trappers used to cut the flesh into strips, which they called fleeces. Dried and pressed buffalo beef was known as pemmican, and looked somewhat like tarred oakum. The substance was tough and hard as leather, but would not spoil, and was easy to carry.

With the progress of the trapper the herds had to wander farther and farther in search of pasture and safety. They swam the broadest streams, and the mothers carried the smaller calves on their backs. In the spring the bulls, a polygamous lot, met in deadly battle for the possession of a mate. According to the accounts of settlers, the bellowing of the combatants could be heard for many miles on a quiet day.

### Bezoar and Lynx.

THE bezoar resembles the Alpine ibex very closely in appearance and habits. This member of the family of goats lives for the most part in the mountains of Asia Minor and Persia, but is sufficiently numerous in some of the islands of Greece. The full-grown buck is about four feet in length, over three feet and a half in height at the withers, but the female is considerably smaller than the male. The body of the animal is thick and its legs thin and rather long. Its horns, very thick and powerful, form a fairly regular bow with the ends bending backward, and both male and female are adorned with a full and imposing beard. In the mountains of Asia the bezoar is found at a height of forty-five hundred feet above the level of the sea, and even at an altitude higher than that. It frequents particularly the places where a certain small yellow flower grows in hardy clusters about the crevices of the cliffs. This vegetation the animal crops



Bezoar Goat defending his Family from a Lynx.



with great relish. In summer the bucks wander in the immediate neighborhood of the eternal snows and venture to the very foot of the glaciers, where they live alone, while the she-goats and their young remain in the lowlands. As soon, however, as the snow falls upon the upper regions, the bucks come down to pair and spend the winter with their families. The bezoar feeds upon grass, cedar needles, leaves, fruits, and the like. It is a very timid animal, and can jump over surprisingly large distances in its flight from danger. It ventures in the most perilous places with so much skill and sureness of foothold that it hardly ever suffers a fall. The eagle, the bearded vulture, and the lynx are among the enemies of the bezoar. The birds of prey often plunge down suddenly and seize a kid, while the lynx creeps noiselessly upon the browsing herd and accomplishes his deadly purpose before the bucks have become aware of his deadly proximity. In fact, this beast of prey, a lean and crafty fellow of the size of our native lynx, and most beautifully spotted, devotes himself largely to the pursuit of the bezoar kids. With its marvellously sharp sense of hearing and of sight the crafty and creeping lynx succeeds, despite the constant watchfulness of the buck, in getting near a herd and pouncing upon one of the browsing animals. Our suggestive picture transports us into the fastnesses of the Taurus, a range of mountains in Asia Minor. A lynx has crept unnoticed upon a family of bezoars, has pounced upon the back of the old goat, and has fastened its teeth into the neck of the animal. Poor Nanny rushes off, bleating piteously, while her courageous mate promptly starts in pursuit and tries to dislodge the marauder by a free use of his horns. This he often succeeds in doing, and then woe to the luckless lynx.



## The Frigate Bird.

THE leading place among the numerous kinds of swimming birds that people the sea and the coasts that border it, belongs to the frigate bird (*Tachypterus aquilus*, as the Latin name runs), of the order of rudder-feet. The frigate bird well deserves to be called the eagle of the sea, for no marine bird can vie with it in beauty of plumage or in swiftness and elegance of flight. Its wings are wonderfully long and finely pointed at the ends; its tail is long and deeply forked, and its body uncommonly light, since the adult bird, which measures a little over three feet eight inches from the point of the beak to the end of the tail, and a little over seven feet and eight inches from tip to tip of his outstretched wings, weighs considerably less than a fair-sized chicken. The plumage of the full-grown male is brownish black with a purple metallic gleam on the head, neck, back, breast, and sides. Its wings are spotted with gray, and the feathers on the upper part of the wings and the tail are brown. The strong, hooked beak is light blue at the base, white in the middle, and horn-colored at the end. The sack at its throat is a rich yellow, and the feet light carmine red — a beautiful mingling of colors which at once indicates that the home of the bird is in the tropics. The frigate bird seldom ventures into more northern latitudes, and is so very numerous about the equator that no voyager who sails by its home can fail to make its acquaintance. It sometimes builds its nest seventy or a hundred miles inland,



Frigate Birds hunting Flying Fish.



and ordinarily goes only about twenty miles out to sea, so that its appearance is always regarded by navigators as an indication of the nearness of land. At every sign of a coming change in the weather, or when the bird has eaten all the fish he desires, he turns from the sea and seeks his nest on the land. The frigate bird lives chiefly on flying-fish, which he pursues with great swiftness. His vision is wonderfully sharp. Frequently he is seen poised motionless high up against the blue sky, or soaring like the eagle, and then he falls upon the surface of the sea with the speed of lightning, to pounce upon the fish which he has descried from his remote station. After he has grasped his prey he flies upward with it, and very frequently drops it three or four times, only to catch it and to fix his talons more firmly into the struggling body before it has had time to fall back into the water. The beautiful huntsman follows the dolphins and porpoises when they are pursuing the flying-fish, and often shares in their booty. His feet are webbed only one-third of the way, so that he seldom swims. He also finds some difficulty in rising from the water or flat ground, and therefore invariably perches upon trees or high cliffs, from which he can begin his flight with the greatest ease. He is strongly attracted by bright objects, such as the vari-colored streamers of ships, and his curiosity in this respect sometimes leads to his capture. The frigate bird may also be caught on land, but he defends himself fiercely, and has been known to resist even ferocious dogs in defence of his young.



## Mongoos and Cobra de Capello.

**I**N India the mongoos (*Herpestes griseus*) does the same service to man that our domestic cat performs in keeping our dwellings free from little four-legged pests ; but on the whole the mongoos is the more useful animal of the two, and is superior to the cat in intelligence and daring. The mongoos is closely related to the ichneumon, the rat of the Pharaohs, the holy animal of the Egyptians. The animal is about a foot and a half long and has a tail of the same length. The hair of the ichneumon, which is especially thick about the tail, is a light reddish brown, flecked with yellow which gives a golden sheen to the pelt. The mongoos is easily domesticated, is capable of great attachment for its master, and follows him about like a dog. It is a good-natured, and almost painfully tidy and cleanly animal. It clears a dwelling of rats and mice in the shortest time, ranging through all hiding places, holes, and cracks until all the little pests have been killed or driven away. The mongoos performs a still greater service to mankind by its fearless pursuit of the venomous snakes of India, among which the cobra is the most dangerous. The bite of the cobra is invariably fatal, and thousands of human beings perish from it yearly. Although the cobra reaches a length of over five feet, the mongoos rushes upon it without hesitation and generally succeeds in conquering his enemy. When he discovers a cobra he approaches it steadily, his little eyes constantly fastened upon the dangerous animal.



Mongoose (Rikki-Tikki-Tavi) attacking a Cobra.



As a rule the cautious cobra spies the approaching enemy in time, and immediately erects the upper part of its body, distends its disklike neck, and, with a loud hissing noise, turns toward the little hero with wide-open mouth, bristling with venomous teeth.

The mongoos approaches slowly, watching every movement of the snake with unwavering intensesness. Immovable as a statue in front, and straining every muscle behind, the cobra glides toward the disturber of its peace: Suddenly the mongoos jumps skilfully upon his enemy, so as to avoid the yawning jaws, catches the snake by the neck, and bites the spine in two with his sharp teeth before the cobra can find an opportunity to use its fatal teeth. The bite of the cobra is as likely to prove fatal to the mongoos as to any other warm-blooded animal. The Hindoos believe that a bitten mongoos makes straight for a certain root, by the application of which it becomes immune against the effect of the poison. The naturalist Brehm thinks that there is some basis of truth for this belief. But, however that may be, the mongoos as a rule emerges from the conflict a victor. Mr. Kipling's story of "Rikki-tikki-tavi" is one of the best mongoos tales on record.

Owing to his useful qualities this animal is kept in a domesticated state throughout India, but he shares with the cat an exceedingly inconvenient liking for chickens, and often uses the cunning of the fox to seize a succulent fowl. The wily mongoos spreads himself out on the ground as if dead. Full of foolish curiosity, the fowls gradually approach. As soon as one of them has come within reach, the little robber jumps up and catches the imprudent visitor before it has time to run away. Therefore the mongoos, no matter how tame it may be, is always rigidly excluded from the hen-yard.



## The Cougar, or Puma.

THE puma is the American equivalent of the lion. This animal is found all the way from Patagonia to the borders of Canada. It is notably smaller than the African lion, usually measuring six and one-half feet in length. The puma also lacks the mane and the beautiful massive build of the African lion, as well as the expressive face of the king of animals. The puma is more catlike and lean, with a small round head, and is very swift and subtle. It has thick legs, armed with sharp claws, and its coat is thick and soft, mainly of a reddish shade of yellow, darker on the spine and lighter underneath the body. The puma is essentially a night prowler, and lives mainly in the forests, which at times it leaves to steal through the tall grass into the pasture lands and farms. Here he works much mischief among the cattle, and is more bloodthirsty than his African relative, for he chokes and tears whenever he gets a chance, destroying far more than he can eat. He invariably drinks his fill of blood before he begins to devour his prey. The hunt of the puma does not involve any serious danger, for his brutishness never attacks man, but invariably seeks to flee from him. This cowardly trait it retains even when it has been wounded, and depends upon concealment rather than upon resistance to escape from the hunter. The puma is very cordially hated in all the countries in which it is to be found. In North America this beast is called the cougar or panther, the Chileans



Pumas fighting for the Booty of a Nandu.



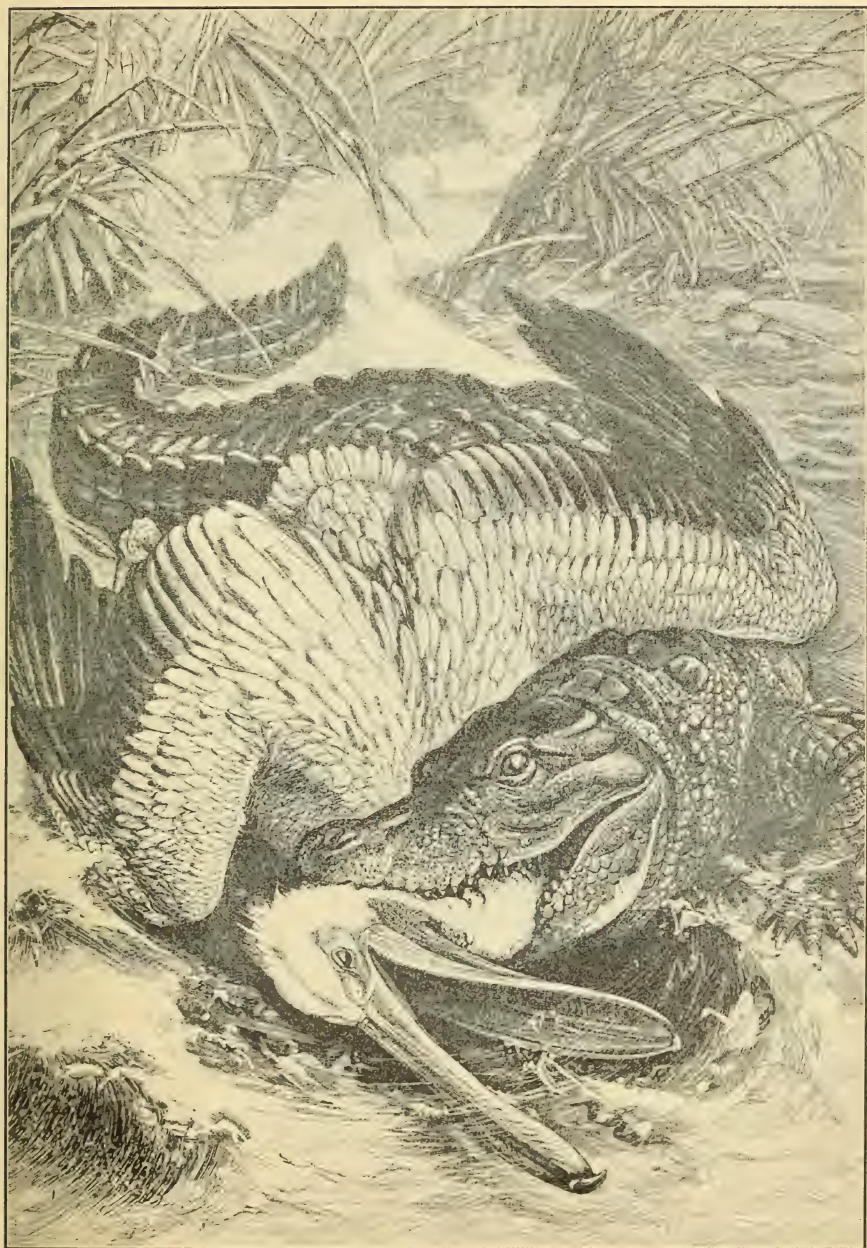
know it as the Papi, while in Mexico it bears the name of Mitzli. The customary prey of the puma is the smaller mammals, such as pacas, sheep, and even calves and colts, but the last two he attacks only when they stray from their mothers. As a rule, however, the American lion fears cattle and horses on account of their horns and hoofs. The puma is such a fleet runner that he often catches the American ostrich on the run. Our illustration shows two pumas struggling for the possession of a South American ostrich. Might will decide the right to the prize, and when the decision has been made the weaker of the two contestants will sneak away whining and whimpering. This beast of prey has so strong a sense of scent and sight that he quickly detects the hunter and hastens to make his escape. In pursuing the puma the hunters use packs of hounds, which surround the animal and prevent its escape until the arrival of their master.

## The Crocodile and the Pelican.

THE traveller constantly wonders at the countless number of pelicans that frequent the waters and fly in great flocks about the banks of the river of Egypt. On the Nile, as far as Khartoum, upon the coast lakes of Egypt, and throughout the inland places near the equator, the pelican (*Pelicanus onocrotalus*), the predominant and characteristic bird, peoples the shores and flocks upon the shallows. This strange bird is a good swimmer and flies well, but cannot dive, and so must range about the shallow water and seize his prey with his ill-shaped beak. For that reason he often changes his home to



seek other waters that have not been searched through. The pelican cannot be classed as a useful bird, nor is it particularly harmful, except when its greed makes too much havoc among the fishes. As a rule, the natives do not molest the bird, and in the seacoast regions about the Red Sea it is so tame that it approaches the ships for scraps of refuse, and does not even take pains to get out of the way of pedestrians, but, with its slow and heavy walk, mingles with the people on shore. At the firing of a shot the entire flock takes the alarm and flies away with an indescribable rustling of wings. These birds travel enormous distances, and flocks of them have been known to stray to the German lakes. In the spring they scatter in swarms about the streams and lakes of Africa to lay their eggs and hatch their broods. No one troubles them at this time, for the Mohammedans regard the pelican as a sacred bird, under the special protection of the Koran. Tradition has it that at the building of the Kaaba in Mecca, water had to be brought from a great distance, and the masons often had to stop work on account of the scarcity of water. Then Allah came to the aid of the workers, and sent thousands of pelicans which filled their crops with water and brought it to the builders. The blacks of Egypt regard the pelican with a superstitious awe, and so none molests the birds at brooding time, when they lay from three to five rather small eggs in a damp nest, built upon the ground, of reeds and rushes. Yet this notable bird has a destructive enemy. The crocodile often creeps upon the brooding mother. The scent of the pelicans must be very dull indeed, for they cannot detect the odor of musk which the crocodile emits at all times. Many broods are sacrificed to the appetite of the crocodile, but their number does not diminish perceptibly on that account.



Pelican attacked by a Crocodile.



## Egyptian Asp capturing a Jerboa, or Jumping Mouse.

**A**S a rule mice are among the pests of mankind, and are treated accordingly. An exception to this rule is the charming jumping mouse, a rare creature, which at first sight resembles a tiny kangaroo. These inoffensive creatures live chiefly in Africa and Asia, where they frequent the dry fields, grassy plains, and sandy wastes, and dig their widely branching houses. Here they remain in close concealment all day long, but after sundown they come out for food, and then hop and jump about in a lively manner, looking for roots, corn, and seeds of various kinds, as well as leaves, grass, and herbs. One jump follows another in rapid succession, and the animal generally succeeds in outstripping a pursuer in a very short time. As the open desert furnishes them with all the food they want, they are not tempted to venture into cultivated land, and for that reason have not incurred the displeasure of the farmers. They have their enemies, however, and among them is the Egyptian asp. The Egyptian variety of this reptile is more formidable than the Asiatic, the full-grown specimen measuring about two yards in length. Its color is generally the color of the desert, and it varies slightly with the color of the exact location in which the animal lives. In Egypt these snakes live in the treeless plains and desert wastes, where they choose their lurking-places amid mounds and stones. Sometimes, however, they seize the dwell-



ing of the jumping mouse, after they have devoured its original occupant. The venom of the Egyptian asp is exceedingly virulent, and causes death in a very brief space of time. And yet the Egyptian fakirs often take these serpents about with them, and make them dance to the music of their flutes in the midst of the crowded market-places. The method which these skilful men use to capture the deadly serpents is simple, and yet very curious. Armed with a long staff, the fakir proceeds to the hole of the reptile, and holds out a thick bundle of rags fastened to the end of the stick. In great rage the serpent bites into the rags. The snake charmer then quickly pulls away the stick to break off the poison fangs, which have been firmly fastened into the rags. When he has accomplished this the fakir grasps the serpent firmly by the throat and thrusts it into the leather sack. In spite of the fact that the catcher is sometimes bitten, and invariably dies of his wounds, he and his kind are esteemed as sorcerers, and are believed to be proof against poison.



Egyptian Asp capturing a Jerboa, or Jumping Mouse.







Marabou in Battle with Hyenas.





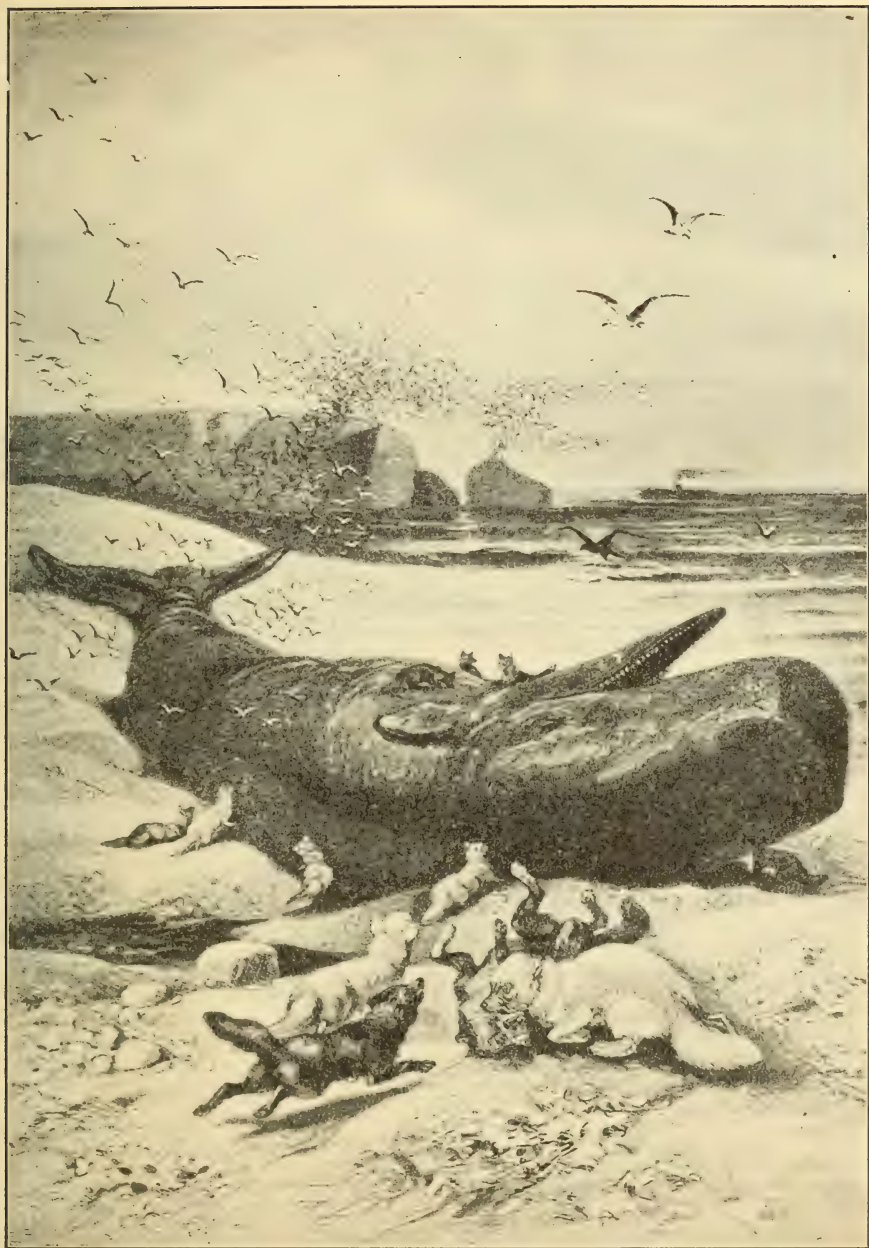
## Marabou in Battle with Hyenas.

THE marabou is greedy beyond any other bird, and has so powerful a sense of smell that it can scent a carcass at an incredible distance away, and can espy with unerring accuracy any wounded animal which may have escaped the hunters in South and Central Africa. With persistent tenacity he follows the movements of the struggling creature. There are more marabous in the wake of the leader, and when the wounded beast finally succumbs the whole flock of winged scavengers drop quickly down upon the carcass, and begin their feast. It very often happens, however, that a pack of hyenas is following the same prey, and a curious battle takes place when the rival bands of robbers meet. The marabous defend their title to the victim with great determination, and inflict many a sore wound with their thick, sharp beaks. The superior strength of the hyenas does not always avail them in their fight with the marabous, as will be seen in our picture, which shows the marabou at his meal defending it against three of his rivals, as eager as they are cowardly, for the bird will stick to his booty until he is half torn to pieces by the snarling pack. Indeed, the marabou seldom gives up the remnant of his banquet until he has gorged himself.

## Sperm Whale and Polar Fox.

**A**S an object of the cupidity of the hunter, the sperm whale is second in order only to the Greenland whale, which surpasses it in size. In addition to blubber, the sperm whale yields the valuable spermaceti and the costly ambergris. But even at that the prize is scarcely worth the danger which must be risked in its capture. While the Greenland whale runs away when it is attacked, the sperm whale defends itself fiercely, and often takes the offensive, overturns or smashes a whaleboat with a mighty blow of the tail, and sometimes even breaks a hole in the side of a whaling ship, sinking the vessel with all on board. Such a performance is not to be wondered at when it is remembered that a full-grown sperm whale often measures ninety feet in length and nearly thirty-five feet about the thickest part of the body. The muscular strength of the giant is marvellous, even when considered with reference to the size of his body. The sperm whale differs from the other great cetaceans chiefly in the form of the head and the shape of the lower jaw, which is noticeably smaller than that of the other whales. To approach a sperm bull whale is so risky a venture that no really accurate representation of the living animal is obtainable.

A much better opportunity for study of the species is afforded when, as frequently happens, one of these giants has been cast up by storms upon some beach, where he soon dies



Stranded Sperm Whale and Polar Foxes.





and is devoured eagerly by beast and fowl. Our picture shows the carcass of a stranded sperm whale which has already been surrounded by greedy gulls and voracious ice foxes. The last-mentioned animals are degenerate relatives of Master Reynard, and live in the polar regions of the Old and New Worlds. The ice fox is much smaller than our well-known barnyard robber, and in summer wears an earth- or stone-colored coat, while in winter he resembles very closely the color of the snow amidst which he lives. The ice fox eats any animal that he can seize, and does not disdain even carrion. Since the sea throws up many varieties of dead creatures, these voracious little beasts are seldom in want of food. Nevertheless, they often fight over their prey, when the victors shriek like angry cats. The ice fox intrudes into human dwellings with amazing boldness, and Arctic explorers are often put to their wits to protect themselves against their greedy guests, which sometimes gnaw the reindeer blankets underneath the sleeping travellers at night.

## Elk in Battle with Wolves.

SEVERAL noble species of animals have nearly vanished from the Old World since its primeval forests were first invaded by man, and among these are the visent, aurochs, elk, and bear. Only the protection of government is responsible for the preservation of the elk, a herd of which is to be found in the forest of Menel, and the Swedish mountains under the watch of wardens, and the few auroxen in the preserves of Birlawitz and the Caucasus.

Is extermination the fate decreed to the giant animals of the world? It certainly appears as if a rigid law of nature condemned these great creatures to death or subjection, while the small pests live and multiply everywhere. The first advantage which the small animals have over the great is in their relative numbers. The greater the animal the greater the amount of food it needs for its sustenance, and the number becomes smaller that can find food only on a circumscribed or limited territory. Many results follow from this equation. The smaller the number of a certain animal, the easier it is to exterminate that animal. Then again, degeneration of the species follows upon inbreeding, and in the long run the survival of the fittest through natural selection becomes ever narrower and less productive. On the other hand, the greater the size of an animal the longer is the period that it requires to reach its full size, and the smaller the likelihood that it will ever attain that size. The greater an



Wolves attacking Elk.





animal is the smaller is the number of offspring that it can bring forth at a time, and the smaller the number of times that it can bring forth young during a lifetime. Great animals also are more at the mercy of powerful enemies, because they find it much more difficult to conceal themselves than do the smaller creatures. Finally, the greater animals are always more valuable prey for man and beast than the smaller ones. A giant of the animal creation cannot utilize its full strength against an aggregation of small animals; and especially against an opponent who has the endowment of intellect the great beast is virtually without defence. Is it a suggestive fact that as Zeus (so we read in mythology) struck down the Titans with his thunderbolt, so weak and puny man has stamped out the Titans of the forests with the fire-tube? It is probably the struggle against ferocious beasts of great size that first engaged the wits and strength of mankind. Everywhere, and among all people, there were formerly giants among the animals; and it was the struggle against these monsters that first brought man to a realization that he is lord of the earth.

## Dingo and Duckbill.

**T**HE dingo is as large as a big shepherd dog, and in some ways resembles the fox. The color of the animal is a reddish brown, and it has a pointed head with upright ears, and a hanging, bushy tail. Its habits are like those of the fox. The fellows in our picture seem to have scented prey. They crouch close to the ground and stalk through the tall grass until they reach the bank of the stream. Their pointed heads are stretched forward, and their little sharp eyes peer intently into the water. The object of their attention is easily to be

seen. A short distance away two duckbills are tumbling and splashing in the stream. One of the dingoes springs quickly into the shallows. The duckbill is a male, as can be seen by the spurs on his feet. He belongs to the lowest order of mammals. His scientific name is given as *Ornithorhynchus paradoxus*. The fact that the animal possesses milk glands and a furry pelt of short, thick down mingled with hairs places it with the mammals, for the creature in other respects can be taken readily for either a reptile or a bird. In common with the last-mentioned order of animals, the duckbill has something that looks very much like a beak, similar to that of the duck. These animals live in the water like the otters, but do not, like them, feed on fish, but thrust their bills deep into the mud for smaller creatures. They build a very strange dwelling of rushes, and their burrows, which open into the stream, extend obliquely toward the surface of the bank. At the end of the passage, about three feet above the surface of the water, lies the nest, a round hole lined with soft leaves and water plants. The duckbill does not bring its offspring into the world alive, but lays a number of soft-shelled eggs which are hatched in a short time. The mother nurses her young just like a cat or a fox. The flesh of the animal is very succulent and is considered a great delicacy.



Dingos hunting Duckbills.





## The Ibex.

**A**LTHOUGH laws have recently been passed to protect the chamois, another not less beautiful creature that dwells on the lofty mountains is being exterminated. This stately ruminant is about five feet in length, and over two feet tall at the withers ; it is known to science as *Capra ibex*, and weighs over two hundred pounds. Many years ago this animal was very numerous all over the Alps, and was often captured alive and taken to the Coliseum at Rome, to take part in the contests between wild beasts. Many a Roman audience was moved to admiration by the appearance of a noble ram with his thick and stately horns. Indeed, the ibex is the noblest game of the mountains and the most difficult to capture. Many stories have survived even to this day of the mysterious powers that were ascribed to this king of the mountains in the remote ages of European civilization. The ibex lives in small bands or families in the most inaccessible parts of the Alpine ranges, and does not propagate rapidly. The creatures are very timid, far-sighted, and extremely difficult of approach. Their flesh, their hide, and their horns are good prizes for the hunter even in modern times ; but a few centuries ago the horns and blood were valued highly as a powerful remedy. The ibex is remarkable for the swiftness of its flight, for the extent and sureness of its jump, and for a certain desperate courage which challenges the admiration of the huntsman. Since the introduction of firearms the number of ibex

has diminished steadily, and for nearly a century past they have been extinct in certain portions of the Alps. During the past score of years a colony of these animals has lived under the protection of the king of Italy in the range of the Mont Rosa, where the late King Victor Emmanuel was in the habit of hunting from time to time. For a few years past the emperor of Austria and king of Hungary and other royal sportsmen have cultivated the ibex in their private game preserves, and have succeeded in maintaining a stock of them. The ibex occasionally mates with the domestic goat, and the offspring retains many of the features of the ibex; but the unadulterated breed is found only in the almost inaccessible regions of the Piedmontese Alps and also in the Val d'Aosta, where the most extraordinary difficulties confront the hunter, so that the species is permitted to propagate at a slow rate. It will be a pity if so beautiful a creature is allowed to disappear from the animal world.



The Ibex.





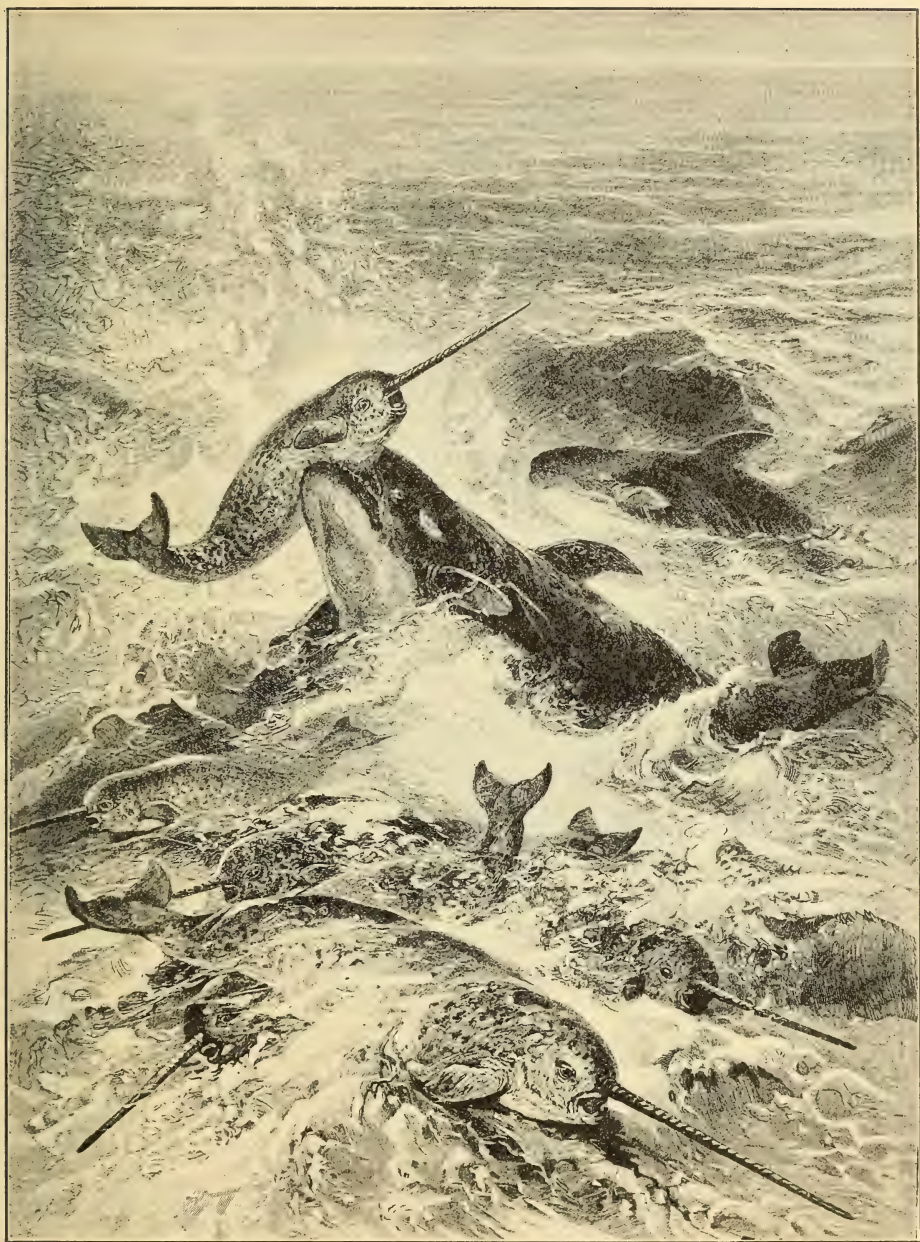
## The Narwhal.

THE narwhal (*Monadon monoceros*, as his Latin, scientific name runs), a member of the great family of sea mammals, is so strangely shaped a fellow that it is no wonder the ancients told all manner of fantastic tales about him. The long battering-ram upon his cylinder-shaped, rounded head, with the eyes on either side, almost upon the snout, has given color for the most absurd stories, which have been disposed of only by the exact knowledge of to-day.

The average length of the narwhal is from thirteen to sixteen feet, but some have been found as long as twenty feet. The breast fins of the narwhal are very small, but the great fin-tail spreads out in two flaps. The soft, velvety hide is shaded according to age and species, but for the most part is white or yellowish white flecked with irregular, dark brown spots. The narwhals are exceptionally sociable and peace-loving. They travel in great herds about the Arctic waters, where the roughness of the weather sometimes destroys them in large numbers, and they perish by thousands among the mighty ice-floes which cut off their supply of air. At other times animate foes make the life of the narwhal miserable. Greedy, wormlike parasites find a lodgement in his bowels and in the cavities behind his palate, and render painful every mouthful that the animal swallows. The fierce grampus (also a mammal) is not in the least appalled by the formidable weapon of the narwhal,

and if he happens upon a school of these mammals, rushes mercilessly among them and wages a war of extermination. Such an occurrence is shown in the picture here given. The narwhal thinks only of flight, because he realizes the superiority of his adversary; but he is often overtaken and falls a prey to his pursuer. The grampus is the most beautiful of all the dolphin tribe, and his graceful and dexterous swimming movements are as silent and as swift as the flight of a swallow; but he is, at the same time, the boldest, the hungriest, and the most rapacious of his kind, and waylays whales with the greatest eagerness. Even man is among the enemies of the narwhal. White men hunt him for his ram, while the little Esquimaux eat his flesh, cooked and dried, and his hide and blubber raw. These yellow, slant-eyed Arctic folk burn the oil of the narwhal's body in their lamps; they make thread of his sinews and fishing bait of his gullet.

In former times vast sums were paid for the narwhal's horn, which was thought to be that of the Scriptural unicorn, but nowadays it may be bought in large quantities in the seaport towns at a moderate price.



Narwhals pursued by Grampus (Swordfish).





## Buffalo attacked by Lions.

THE Cape or Caffir buffalo is the mightiest and wildest animal of his kind in the whole of Middle and South Africa. His true character as a fighter is plainly indicated by his formidable horns. During the hot daylight hours the bulky beast lies motionless, preferably in some puddle. Late in the day he leaves his resting-place to graze until morning. At intervals he stops feeding, and looks about him, grunting and showing other manifestations of ill temper. The buffalo carries his broad, massive head always half lowered, as if for immediate attack. Beneath his powerful horns a pair of great blue-black eyes gleam so wildly that the animal always conveys the impression of unbridled savagery, reckless fury, and consummate craft. And indeed the buffalo is an extremely dangerous beast. He plunges his horns into his victim, tosses it aloft, and when it has fallen to the ground he stamps upon it, and tears it to pieces with horns and hoofs. Even the lion, much as he is feared as the king of beasts, does not dare to attack a buffalo alone; though two or three lions will often undertake the task. Oswell, the companion of Livingston, was once following, with a comrade, a wounded buffalo. They were on horseback; suddenly three lions appeared, bore the great buffalo to the ground, and fought with him fiercely. The lions did not abandon their victim even when the two hunters had ridden near enough to level their rifles at them and wounded two, but mangled it and tore away all

the more savagely. Only when two of them had been killed, did the third lion make up his mind to run away.

Our picture portrays a desperate battle between a buffalo and a pair of lions, in which the latter have already been victorious, and are about to devour their prey.

## John Dory and the Octopus.

**A**N old tradition has it that John Dory is a herring-king, with a head of iridescent gold and with reddish sides, which leads and directs the herring-school. This fish, however, does not belong to the herrings, and the confusion has arisen because it follows, in company of forty or fifty, the wandering schools of herring and sardines which are its food. It is a beautiful fish. The ground color is olive-gray or grayish yellow, with a swiftly changing sheen from blue to gold and silver. In the Mediterranean it is often of a pure gold color. Characteristic is the deep black eyelike speck encircled with white, on both sides of the body. According to legend, these marks were made by the fingers of the apostle Peter when he drew the fish from the water and took from its mouth the tribute money mentioned in Scripture. The creature, indeed, is sometimes called Peter's fish. It lives properly in the Mediterranean, but ranges as far as British waters. In spite of its somewhat ungainly figure, it swims swiftly. The flesh is highly prized as an article of food. The picture shows a John Dory attacking an octopus, an animal belonging to the family of the head-feelers. The lengthy body of the octopus is loosely enveloped in a stout skin, its mantle, while the head protrudes free. The head is separated from the trunk; on the side are two great eyes, and



Lions tearing up a Caffir Buffalo.







John Dory hunting Octopus.



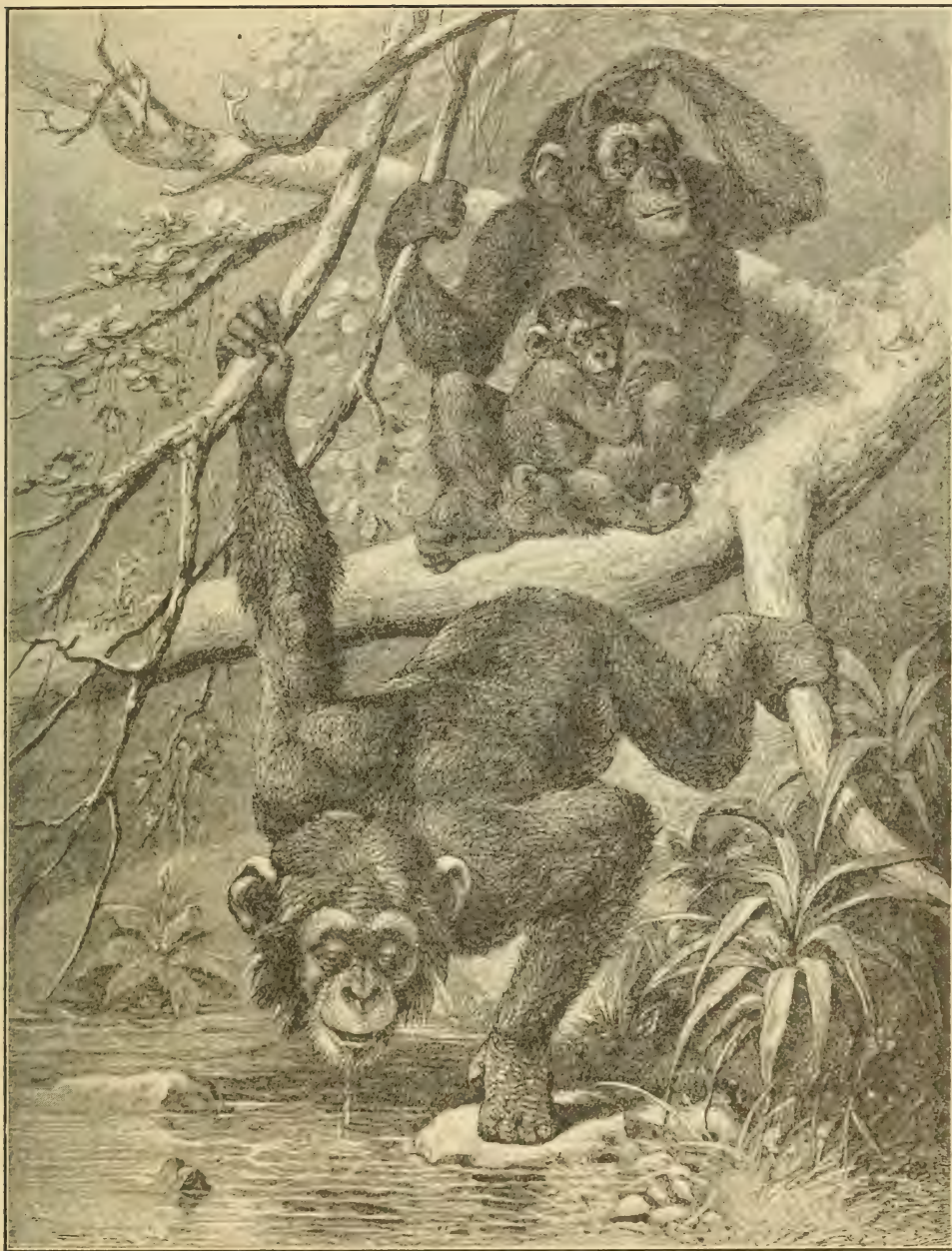
in the mouth two sharp, curled jaws, not unlike a parrot's beak. About the mouth are ten arms. Eight of these are comparatively short, and provided with sucking mouths through their entire length. The other two are remarkably long, exceeding the length of the body. On the ends of these are smooth surfaces, also furnished with mouths. After unrolling these arms, the animal seizes its prey with them and thus conveys it to the mouth. The finlike skin extending around the trunk serves as a means of swimming, and the little arms underneath are used as rudders. The fish has a pear-shaped gland which secretes a black fluid, highly prized as India ink. The color of the beast is reddish with white spots, and edged with violet. When excited it turns a dark chestnut-brown with a coppery glint. The flesh is palatable, and is much eaten in Italy. The fish is found from the Mediterranean to the North Sea. It reproduces itself by means of eggs which are laid in the weed and sea grass. With its arms outstretched the octopus is from a foot to two feet in diameter. Many, however, grow to an enormous size. One similar to the specimen shown in our picture was captured in the narrows of Belle Isle. The body without arms was sixteen feet across, while the arms measured over thirty-three feet.



## A Family of Chimpanzees.

THE chimpanzee (or *Simia troglodytes*) in all probability was known to the writers of a few centuries past as the "Inseigo," or "Unschiego," a name which this extraordinary and interesting animal still bears in its home in Central Africa. The chimpanzee is native to upper and lower Guinea, and the country back of it, ranging from Sierra Leone to the Congo. He is considerably smaller than the gorilla; the full-grown male sometimes reaches a height of forty-two inches, and the female is twelve inches smaller than that. The skull of the chimpanzee is somewhat flattened; its upper lip is long and wrinkled, and the general appearance of its face is suggestive of good nature. In its natural state, and when free from intrusion, the chimpanzee often assumes an upright position, but at the first indication of danger it drops on all fours and runs for dear life. The chimpanzees build curious hutlike nests in the trees, using branches as building material. Wonders of domestication have been accomplished with chimpanzees that have been captured young; but, for some inexplicable reason, the animals often sicken and die when they have been deprived of their freedom.

Our picture presents a family of chimpanzees in their African home. The father has half suspended himself from a bough, and is drinking of the limpid stream below with an unmistakable look of satisfaction, while the female, with the baby in her



A Chimpanzee Family.



lap, so to speak, is peering carefully into the thicket, shading her eyes from the sun much as a human being would do, on the lookout for the appearance of an enemy.

## Fighting Kangaroos.

THE kangaroo is one of the most inoffensive among animals, and yet even this gentle creature occasionally finds it necessary or convenient to declare hostilities against one of its kind. Our picture shows two males of the Australian species, known as the giant kangaroo, engaged in a desperate trial of strength and endurance. The sight is an extremely impressive one. The fighters stand nearly six feet from the ground when in an upright position. One of the combatants has evidently been too attentive to one of the two females in the immediate background to the right of the battle scene. The meddlesome animal has been attacked vigorously, and the picture shows him on the point of being overpowered. Neither of the combatants can accomplish much with his fore paws, but the powerful hind legs of the kangaroo can inflict grievous bruises and scratches upon the body of its foe. Thus the battle is pressed fiercely, and the fur is torn out in patches from the pelt, first of one animal and then of the other. The rest of the kangaroos within sight of the struggle show no inclination to complicate matters by offering to interfere in the combat. On the contrary, they appear to regard the conflict as a legitimate and just one, and are bound to observe the laws of neutrality as they are interpreted by the proper authorities in Kangaroo-land.



## A Whale attacked by Grampi.

THE Greenland whale (*Balæna mysticetus*) may well be regarded as one of the largest animals known to mankind.

It is recorded that in 1813, a monster specimen of this mammal was captured near Spitzbergen, which was sixty-eight feet long. More often, however, the creature is from forty to fifty feet long, and impresses the observer as being exceedingly awkward, with its large head, split open almost to the throat by a huge toothless mouth, its small eyes, set well back into the body, which ends in an enormous tail, so powerful that with one sweeping blow it can smash the most compactly built whale-boat. It has been hunted industriously for its oil and baleen, or whalebone, until its numbers have diminished very perceptibly. Among its most destructive foes, the Greenland whale counts the grampus (*Orca gladiator*), nicknamed by whalers the "Wolf of the Sea." The grampus is a distant cousin of his chief victim, and measures from twelve to fifteen feet in length. He is a voracious creature, bold to a degree, and with a manifest liking for a fight. Very often a small school of grampi, numbering five or six specimens, attack a Greenland whale, plunging their teeth into its fins, its sides, its lips, and continue their assaults upon the giant with tireless energy. The mighty leviathan of the deep churns the ocean into a foam for many rods around, as he plunges back and forth in desperate attempts to shake off his tormentors. Our impressive illustra-



Fighting Kangaroo.





Whale attacked by Swordfish.





tion shows such a battle in progress. The whale has succeeded in tossing one of his fierce assailants into the air, much as a stag tosses a dog. Two other grampi, however, are clinging to his lips, and two more have buried their teeth deep into one of his fins. The enormous strength of the leviathan does not avail him much against the determined wolves of the sea, who will probably soon have the huge carcass of their victim at their full disposal.

### A Battle between Deer.

**A** MELANCHOLY picture from the rich sketch-book of nature is shown in this illustration. Two stags of the European forests have been overcome by a terrible death, while in the midst of the clash and shock of a struggle for life. At the opening of the mating season the stags, in the full splendor of their newly grown antlers, like kings of the forest with newly burnished crowns, are in the habit of engaging in deadly duel for the undisputed possession of the females of the herd. The two magnificent specimens shown in the picture have been fighting desperately on the summit of a mighty cliff, each combatant trying to hurl the other upon the cruel rocks below. They have succeeded beyond their expectations; for both have plunged into the abyss, and are now lying upon their rocky deathbed, one already dead, and the other in his death throes, bleating piteously to the startled herd above.

## Wapiti Deer on a Rocky Mountain Range.

THE wapiti (or *Cervus canadensis*) is a noble American representative of the deer family, and is sometimes erroneously called the American elk or gray moose. The Cree Indians call the animal the wawaskeesh. This magnificent creature is larger than the European stag. The antlers of the two animals are very much alike, but those of the wapiti are heavier. The general color of the wapiti is a light chestnut-red in summer. In the winter its coat is dense and soft, and its hues are grayer than those of its summer covering. Two centuries ago the wapiti was quite generally met with in the mountainous or hilly regions of North America, but the advance of civilization has caused it to retreat westward, until it has disappeared completely from all sections east of the Rocky Mountains, with the exception of Montana and the Dakotas. It is by no means rare in northern California, Oregon, and Washington, but it is much more numerous in Canada, where it frequents low, well-wooded tracts in the vicinity of swampy lands. The habits of the wapiti are similar to those of the stag, and the males of the herd battle fiercely for the possession of the females at the opening of the mating season. At these times the male utters a peculiar sound, resembling somewhat



The Monarchs of the Glens.







Wapiti Deer on the Rocky Mountain Ranges.





the braying of an ass, beginning with a loud, shrill note and ending in a guttural sob. In May or June the female gives birth to a fawn, — sometimes, in rare cases, to two. In the ranges of the Rocky Mountains, where the wapitis are comparatively unmolested, these noble deer wander about in large herds. Such a herd is pictured in our illustration. Amidst the virgin solitudes, covered with an unbroken mantle of snow, the wapiti range at their leisure, picking out the scant vegetation beneath the snow.

## A Duel in an Indian Jungle.

THE Indian buffalo is an ancestor and distant cousin of the huge, lumbering black animals, with horns curling down low upon the back, which the traveller meets through the valley of the Danube, in Italy, along the waterways of Egypt, and in India. The Indian buffalo is a ferocious and powerful animal, and reaches an average length of nine feet and six inches. He shares with the elephant the honor of being the most destructive enemy of the tigers that infest the dark jungles of India. The buffalo presses the war against the tiger in the wetter regions from the foot of the Himalayas, through Bengal and the eastern portions of Central India, southward to the neighborhood of the Godovari, and eastward through Assam and Burmah as far as southern Siam. Like his European relative, the Indian buffalo (*Bos* or *Bubalos arni*) is almost an amphibious animal. For hours at a stretch the slow-moving, awkward beast conceals himself from the rays of the sun, and from fly-pests, by sinking his body in some stream or lake, and lying there motionless, with only the tip of his nostrils and a part of his horns visible above the surface of the water. Sometimes, while the buffalo is issuing from his nap in the water, the tiger takes advantage of the occasion to spring upon the unsuspecting animal from a clump of underbrush, and then follows a battle in which the buffalo, by virtue of his superior



Indian Buffalo attacked by Tiger.





strength, is very often the victor. In our picture the tiger has evidently the advantage over his enemy, but the tables may yet be turned by the appearance of other buffaloes upon the scene of conflict.

## Wandering Reindeer.

ALL over the sub-Arctic regions of the earth, where the struggle between man and the elements is most severe, Nature has provided an almost universal means of sustenance for her human children. To the Laplander, the Kirghiz, and other Mongolian races in the extreme north of Europe and Asia, the reindeer is as indispensable as are the wheat field, the stock farm, and the coal mine to the inhabitants of lower latitudes. It may be said, in truth, that this hardy animal meets all the demands of man for food, for clothing, for transportation, and for a variety of other supplies. Both sexes of the reindeer (or *Rangifer*) have antlers. The shape of the animals is rather ungainly, the head being cumbrous, the legs short in proportion, and the tail little more than rudimentary. The larger specimens reach a length of six feet, and the average height of the animal at the withers is about three feet and a half. Tribes of Laplanders and Finlanders wander throughout the half-frozen north with their vast flocks of reindeer in search of the scant growth of moss. This supply of fodder, stored by Nature under its covering of snow, the reindeer uncover by digging and scooping with their hoofs and muzzles. Nothing in the scenery of the far north impresses the traveller more than one of these great flocks, under a darkening, leaden sky, silently digging and scraping for their food, while in the background the smoke from the Laplanders' tents rises slowly skyward to mingle

with the perpetual murkiness above. Some naturalists are disposed to regard the American reindeer (the caribou) as a distinct species of the reindeer. The caribou, however, is larger than the European reindeer, has smaller antlers, and is darker in color. Our picture shows the advance-guard of a herd of European reindeer crossing one of the bleak stretches of country which is characteristic of their northern home.



Wandering Reindeer.







A Boar Hunt.





## Dogs pursuing a Wild Boar.

**T**HE wild boar of Europe, which figures so prominently in the annals of the chase, is an own cousin of our familiar friend, the farmyard hog; but the boar is a much larger, stronger, and altogether more dignified and respectable animal than his domesticated cousin. The wild boar has many of the characteristics of the domestic hog. Like the latter, he is a voracious animal of destructive habits. When a field has been visited by a wild boar in search of food, the crops have been uprooted or trodden into the ground, and the entire neighborhood of his boarship's line of march looks as if a cyclone had torn through it, leaving general destruction in its path. The wild boar is hunted eagerly throughout Central Europe, and his prowess is such as to entitle him to the respect of the huntsman. In the realistic picture here given, the pack of fierce bloodhounds, after a desperate chase of many hours over plain and hill, has at last surrounded its prey, and the death struggle has begun. The hunted animal, his eyes glowing with anger, has just knocked down one of his pursuers with a blow from his formidable tusks. But other members of the pack have buried their teeth deep in his neck, and the indications are that he will be overpowered before the eager huntsmen come upon the scene.

## Tayras pouncing upon a Pampas Deer.

THE tayra (*Galictis barbara*) is a prominent member of the marten family, and the forests of Brazil are its chief habitation, although it is to be found in sufficiently large numbers in other portions of South America. It has the long, slender body distinctive of the family to which it belongs, and is an indefatigable hunter, ranging the trees in search of small animals, upon which it pounces swiftly, and chokes them to death, almost as soon as it has seized them. In this manner it destroys large numbers of hares and other rodents, and is not afraid to attack even larger prey. Throughout the pampas or jungles of South America there wanders the beautiful and inoffensive pampas deer, which is plentiful in Paraguay, Uruguay, Brazil, and some parts of the Argentine Republic. The body of this charming creature is about fifty inches long, its limbs are slender, its eyes large and mournful. All through the heat of the day, the little deer lies curled up in its bed amidst the shades of the lush grass, but at sundown it ventures from its sleeping quarters and wanders to the streams and springs to drink its fill and to crop the sweet grasses. The wily tayra watches its chance to spring upon the harmless creature and to tear it to pieces for its evening meal. Such a painful episode of the life of the pampas is shown in our picture. The poor deer has already given up the struggle, because it is pinned down too securely to hope for escape.



Tairas pouncing on a Pampas Deer.





## An Elk at Bay.

THE elks (or *Alces*) are the giants of the deer family, and like all the other giants, from Anak down to modern times, are fast vanishing from the face of the earth. The family now has but one representative in existence. Scientists have not yet agreed to regard the American moose as a distinct species of elk. The elk is, indeed, a formidable beast. The adult animal ranges from nine to ten feet in length, and the larger specimens reach a weight of a thousand pounds. A few small herds of the European elk are to be found in the private preserves of German noblemen, where they are kept under the strictest protection. In its natural state, the elk is to be met with, rarely, in the Baltic provinces, in parts of Sweden and Norway, and a few regions of Russia. The physical characteristics of the elk are well calculated to give him an appearance of ferocity, for he is a huge, clumsy, long-legged animal, with spadelike antlers, a large ugly head, and small, vicious-looking eyes. The ears of the elk are long and broad, and his tail is so short as to be almost lacking. During the mating season the animals roam in small herds, through the wildest and loneliest forests, preferably in moist, swampy places, and crop the water grasses and young leaves. When the time of calving approaches, the males abandon their mates, and herd by themselves until the following season. Our picture presents a characteristic and pathetic scene. An American moose, pursued through his native swamps by the eager hunters and their no less eager dogs, has kept up a steady, rattling trot for hours. At last, exhausted by pursuit, and bewildered by the din of his enemies, he has halted and is about to give battle to the dogs. A bullet from the hunter's rifle, however, will put an end to the unequal contest.

## Kite, or Glede, and Saker.

**T**HROUGHOUT nature animals are beset by enemies. Sometimes two marauders come into conflict. This picture shows a red kite, sometimes called a glede, which has found the nest of a saker on an island in the Danube. The foundation of this bird-house is of twigs and branches, and the interior is lined with shrubbery, foliage, and leaves. The glede is pleased with it. When garnished with some rags and bits of paper, it will make a nice abode for his own young. So he takes possession, and hurries away for the missing materials ; but food must first be found for hungry stomachs. We see him sweeping on high. Suddenly he plunges downward upon a hurrying mouse, a frog, a small bird, or a fish. The great bird, two feet long and over four from tip to tip of his outstretched wings, looks splendid in his airy flight. Then a second bird of prey appears. The newcomer is somewhat smaller than the red kite, being only eighteen inches long and a little over forty with outstretched wings. This is the saker, the possessor of the confiscated nest. He is the most formidable enemy of all birds, from the big wild goose to the tiny finch. The saker flits about like a shadow, and his powerful claws clasp the shuddering prey like a vise of iron. The kite pursues with a loud scream. In vain does the saker seek to escape. The piercing cry comes nearer. Finally he drops his booty and hurries away, while the kite devours his stolen prize at his leisure. But



Elk-shooting in the North.







Kite fighting with a Saker for the Possession of Nest.





the two robbers are to meet once more. After the hunt the saker seeks his nest, and finds the kite busy upholstering it for his own use. The saker's anger is aroused, and he flings himself upon the intruder. But the kite, although a coward, refuses to give up the place. With powerful blows of their beaks they try to wound and stun each other. How will the battle end? This time the right triumphs, for the saker is stronger and more agile than the kite.

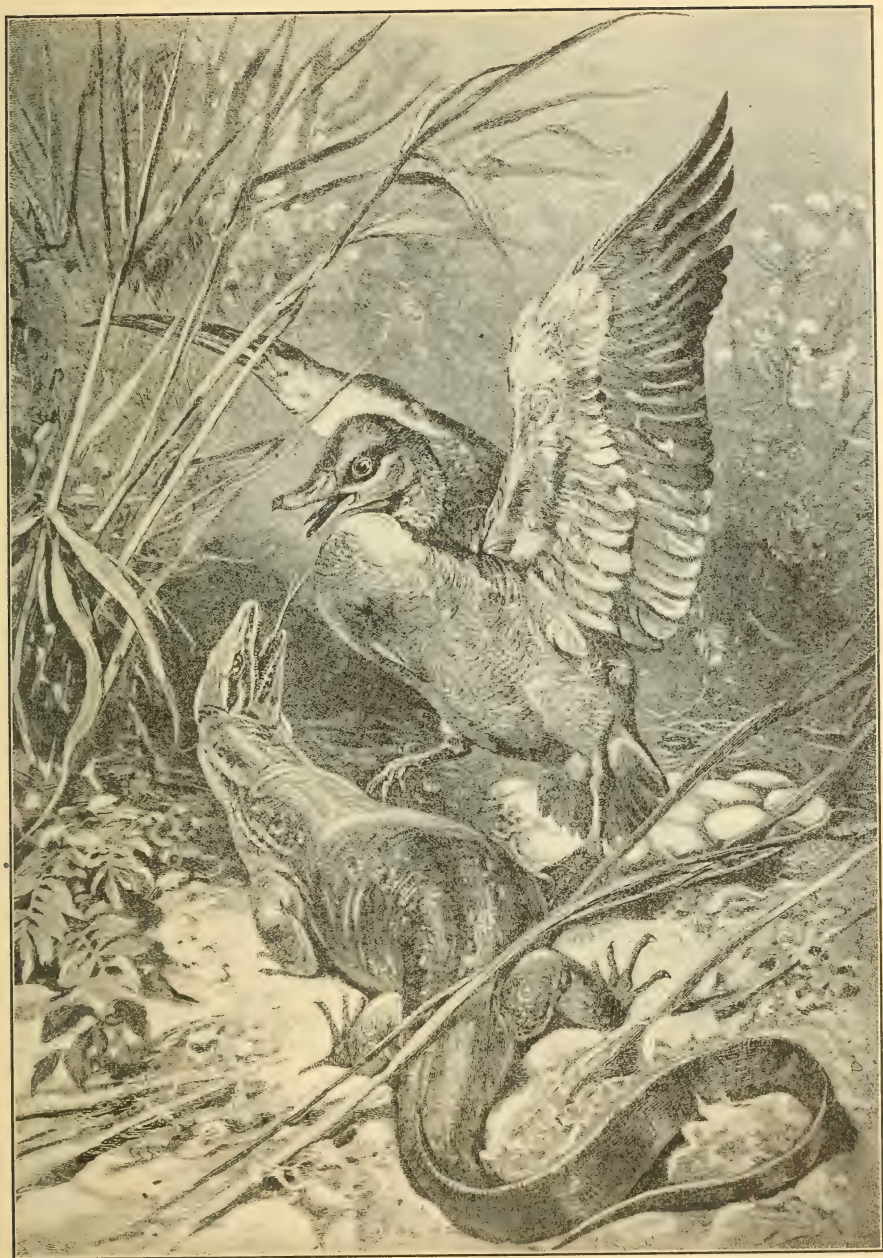
## Monitor and Egyptian Goose.

THE monitor is very much like our native lizard, but is more aggressive and courageous. The German name of this animal arises from an error. The creature is called *varan* in Egypt, and hence the scientific term *monitor*, or the "varan of the Nile." The ancient Egyptians thought the *varan* devoured crocodiles' eggs and swallowed the young. This actually occurs sometimes. The monitor is over five feet long, yellowish green with black spots, yellow dots and greenish yellow points. The compressed tail has a quill composed of a double row of scales, black part of the way, and shading into yellow toward the end. The monitor lives near the water, is very swift, and easily catches small animals. He eats frogs, snakes, smaller lizards, birds as large as a dove, and four-footed beasts as large as a rat. He does not disdain insects and worms, and birds' eggs are not safe from his marauding. Our picture shows a monitor surprised while robbing the nest of an Egyptian goose. The goose attacks the intruder valiantly, and tries to drive him off with blows of wings and beak. Yet the monitor stands his ground. The small, gleaming eyes

watch every movement of the goose. Hissing and foaming, he holds out his open mouth with its numerous sharp teeth, and a long forked tongue darting out between them. Suddenly he springs upon the goose, and the latter withdraws in fright. The monitor's attacks become bolder and bolder, until the goose is in full flight. Then the lizard approaches the nest, licks up an egg with his sinuous tongue, seizes it in his jaws, lifts his head, breaks it, and sucks out the contents with satisfaction. One egg follows another, until the nest is empty.

### Tree Panther and Tree Snake.

THE picture shows an incident of animal life in Sumatra. A pair of birds have built their nest in the fork of a great tree on the edge of the forest. The male hunts for food while the female broods. Soon the young are hatched out, and the old birds fly about in search of supplies. While they are absent a tree snake winds swiftly up the tree. It is what is known as a shokari, a beautiful creature nearly three feet long, a glittering bronze-brown on the back, with yellow stripes and black and yellow bands on the sides. The tree snake has seen the nest, and quickly glides up to it with gleaming eyes. One little bird after another disappears into the gaping mouth of the monster. Then he rolls himself up in the soft nest to take his midday rest. Soon a catlike beast of prey, almost as big as a leopard, appears. It is the gray panther, who spends most of his time in the trees, robs nests, and pursues his prey from bough to bough. He has reached the branch where the nest is, when the male bird returns. The father screams, and the mother replies with cries of distress. But the panther



Nile Varan surprised by an Egyptian Goose.







Panther surprised by a Tree Snake.



knows that he has a choice prize in the nest, and continues to advance. The snake, however, is awakened by the outcry, and as the panther raises his head to look over the nest, the original thief rushes upon him with an angry hissing sound. In affright the panther draws back and begins to retreat slowly. The birds of the neighborhood have been aroused by the grief of the parents, and come from all sides. They see the snake, their hated enemy, and swarm about it with loud shrieking. The reptile awaits them with uplifted head. Not a movement escapes it. When a daring bird comes too near, the snake darts forward with the swiftness of lightning. The bird is caught and pays for his temerity with his life. The snake then retires again to the soft nest and resumes his interrupted noon-day nap.

## The Leopard meets his Match.

A CURIOUS battle is presented in this picture. A mother hippopotamus, half drowsy in the drone of the noonday heat, has been wallowing in the tepid stream near the bank of the upper Nile. Her offspring, a charming little fellow who is an exact miniature of his cumbrous and indolent mother, has strayed a short distance away from her, quite unaware of the danger that lies lurking behind the stump of a fallen tree. Suddenly, something terrible happens. A hungry leopard (the *Felis pardus*) has sprung upon the little fellow, determined to have its comparatively tender flesh served for luncheon. The robber has counted without his host, however, for the mother, aroused by the commotion, has plunged quickly to the scene of action, and has closed her great jaws upon the body of the leopard before the latter has become aware of her presence. The battle will be exceedingly short. The leopard will be ground to a shapeless pulp in that enormous mouth, and the little one will limp away into the stream with its mother, perhaps bruised for life by nails and jaws of the leopard, and at all events a sadder and more cautious little hippo for the rest of its babyhood.





Hippopotamus defending its Young against a Leopard.





## A Battle between Giants.

THE powerful pachyderms (or "thick-hides") of the African animal world, such as the elephant, the rhinoceros, and the hippopotamus, feed entirely upon plants, and need for their maintenance great stretches of territory, over the sole possession of which they watch with unmistakable jealousy. The hippopotamus generally has first choice of feeding grounds, and lives luxuriously on the water plants in the great rivers and lakes. His claims are seldom disputed by any of the other quadrupeds, for all the jungle folk avoid the mighty, lumbering, and hot-tempered brute whenever they can. Hippo is not, therefore, a wandering animal, but maintains a permanent residence. The elephant and the rhinoceros, on the other hand, are often driven from one place to another by droughts and other causes. The elephants travel in herds of from five to fifteen head, and go on extended wanderings to seek out boggy, moist ground, or districts in the vicinity of running water which has kept the vegetation green and succulent. The rhinoceros moves about in a similar way, but this sulky, morose beast prefers to live as a hermit after the pairing time is over. When two such giants as the rhinoceros and the African elephant happen to meet in the course of their journeyings, a battle is apt to ensue. In such an encounter the rhinoceros is usually the aggressor, for the African variety of this animal is exceptionally bold and savage. The elephant, to be sure, is superior to the rhinoceros in size and

in strength ; but the rhinoceros is, in spite of his unwieldy, cylindrical bulk, surprisingly quick in his movements, and has in this way some advantage over the elephant. The short body of the rhinoceros gives him another superiority over his adversary, because he can rush beneath the elephant and plunge his horn into the belly of his enemy, whom, in this way, he often injures seriously. When, therefore, an elephant and a rhinoceros have met in conflict, the battle becomes a contest of dexterity and skill in giving and parrying thrusts. The animals circle about each other at a gallop, shaking the ground with their heavy tread, each one trying to get a hold upon the flank of the other. Sometimes the elephant finally succeeds in making a good use of his long tusks (as shown in the desperate fight presented in our picture), and then the fate of the rhinoceros is sealed. As soon as the elephant has impaled his enemy he brings his thick fore legs to bear upon him, presses him down to the ground with all his ponderous weight, then proceeds to crush his head, and generally leaves the conquered beast upon the field a shapeless, trampled mass.



A Battle between Giants. Rhinoceros fighting with Elephant.





## A Beaver Colony.

THE beaver is a marine architect in the true sense of the word. His life and habits are plainly suggested in the accompanying picture. Although a rodent like the mouse, the hare, the squirrel, and their cousins, he differs from them in size and in methods of living. Just as the squirrels have chosen the hollow of a tree, the rats and mice the earth for their dwellings, and the hares the fields and woods for their habitations, so the beaver selects the water as his especial home-quarters. Here he displays an astounding activity and a marvellous engineering skill. The beaver lives in large communities of his kind, and the wonderful dams with which he blocks the unruly streams are the result of the united and intelligent labor of the entire settlement working with a common purpose toward a common end. Like the majority of rodents, he builds his house deep beneath the surface of the ground, but at no higher level than the surface of the water with which it is connected. His dwelling consists of an underground gallery thirty or forty feet in length, parallel with the stream; it has a smooth floor bottom, and is lined with sticks and dried leaves. There are several of these galleries in a settlement, and they are each of them occupied by several couples who live together in peace. In order to keep the level of the water as nearly uniform as possible, the beavers build the dikes and dams. For this purpose they cut down trees with their teeth and gnaw them into sticks

a yard or more in length. These are towed to a suitable place through the water and are moored in some inexplicable manner. The crevices between the logs are then filled with earth and stones, and the dam so constructed is strong enough to hold the water back. These structures are sometimes from six to ten feet in height and from twenty to twenty-five hundred feet long. The flow of the water itself contributes to the strength of the dam, as the wood and refuse floating down stream become firmly embedded in the retaining wall, and in course of time it becomes practically indestructible by any ordinary agency. The pool that gathers at the head of the dam forms a convenient playground for the animals. Here the beavers erect their so-called strongholds, big rounded mounds about ten feet high, which are put together in the same manner as the dams, and are used as places of refuge when the water is high. The activities of the beavers often effect a change in the entire character of the locality in which they live. The dams turn little brooks into chains of ponds, in which the globe-shaped strongholds are conspicuous. The wood-covered banks of rivers are robbed of their timber, which gives place to clearings known to the trappers as "beaver meadows." These are often the only open spaces to be found in the virgin forests.

The peaceful times in which the beaver could exercise his skill at his leisure and in security have gone by. Only now and then, in the primeval forests of North America, does the trapper come upon an entirely undisturbed beaver colony, and then his prize is a rich and rare one. Years ago, however, the beavers were to be found not only in North America, but swarmed in great numbers throughout Northern Europe and Asia. They disappeared quickly before the advance of man, who hunted them eagerly for their flesh and fur, and especially for their valuable castoreum, the early remedy for hysteria and



A Beaver Colony building Dams.





gout, which consisted of a secretion in the glands of the hind part of the animal, very bitter in taste and of a pungent odor. The beavers in Europe were also regarded as undesirable animals because they worked heavy damage to the forests. Only singly and at exceedingly rare intervals are beavers to be found in Europe now.

## Quarrelsome Storks.

THE common stork of Europe is one of the most intelligent of birds, and his dignified, thoughtful bearing, his steadfast domestic relations, and his filial love are universally known in the Old World. But he has other qualities which are not at all praiseworthy. It is believed, for instance, that the stork is a good-natured and harmless bird ; but he is really no such thing. His race, in order to propagate itself, legalizes murder, and his ferocious instincts turn him at times even against those of his own household. It is recorded that storks have overthrown the nests of another pair, despite the desperate resistance of the original owners, and, after killing the old birds, have thrust the brood out of their home and have appropriated the nest to their own use. Many storks do not allow another stork's nest within a certain distance of their own. This prerogative they maintain with stubborn perseverance, and perish rather than allow it to be violated. But particularly when jealousy enters into the quarrel the stork knows no jesting. He falls into a furious temper, and attacks, not only his rival, but even the wife whose conduct has furnished grounds for suspicion. Our picture illustrates an incident of this sort, which was observed in a town of Brunswick, in Germany. Many years ago a peaceful pair of storks who were nesting there suddenly broke out into a fierce quarrel, because Master Stork thought that he had reason to suspect that his wife had favored the advances of another stork. The jealous husband finally pecked the faithless one out of the nest in which she had been hatching, and thenceforward lived a hermit, mourning the wreck of his domestic happiness.



The Quarrelsome Storks.





## The Cat and the Donkey, or a Safe Port.

THE donkey though so often the butt of the farmyard, alike in fact and in fable, is really the oldest and most helpful of domesticated animals. *Asinus vulgaris*, the domestic ass, is his scientific name, and he varies in size and strength according as he is carefully bred and reared. The ass did not get his name of donkey in England until about one hundred and fifty years ago; but the reputation of the misjudged and faithful beast for stupidity dates back to earliest times.

And yet the ass or the donkey possesses qualities which, well trained, make it almost the equal of the horse; neglect and ill treatment have made him stunted, stupid, and silly. Among the Arabians and the Persians the ass is highly developed; while in this country the imported ass, brought from Southern Europe and carefully reared, is of exceptional strength and value. The little donkey, such as the picture shows, becomes under kind treatment a docile and affectionate farmyard pet; but teased, maltreated, and put to the meanest tasks, he becomes stubborn, stupid, and often vicious, with hind legs ever ready to defend himself against tormentor or persecutor. Pussy, at least, finds him here a safe retreat from danger, and the baffled dogs are very cautious of the threatening and uplifted hoof.

## Types of Dogs.

1. Hanoverian bloodhound.    2. Short-haired German setter.
3. Long-haired German pointer.    4. German setter.    5. Wire-haired German setter, or griffon.
6. Pointer.    7. English setter.
8. Short-haired dachsdog.    9. Long-haired dachsdog.
10. Smooth-haired fox terrier.    11. Wire-haired fox terrier.
12. Deerhound.    13. Greyhound.    14. Barsot, or woolly-haired Russian greyhound.
15. Field spaniel.    16. Long-haired St. Bernard.
17. German dog.    18. Scotch collie.    19. Bulldog.
20. Spitz dog.    21. Rough-haired German.    22. German shepherd dog.
23. Bull terrier.    24. Airedale terrier.



The Cat and the Donkey.







Types of Dogs.











LIBRARY OF CONGRESS



0 009 157 967 4